harman/kardon

AVR430

7 X 65W 7.1 CHANNEL A/V RECEIVER

AVR630

7 X 75W 7.1 CHANNEL A/V RECEIVER

SERVICE MANUAL

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Rev2 10/2005

ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field effect transistors and semiconductor "chip" components.

The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge build-up or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical change sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material.)
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   CAUTION : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together or your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES devices.

PRODUCT SAFETY NOTICE

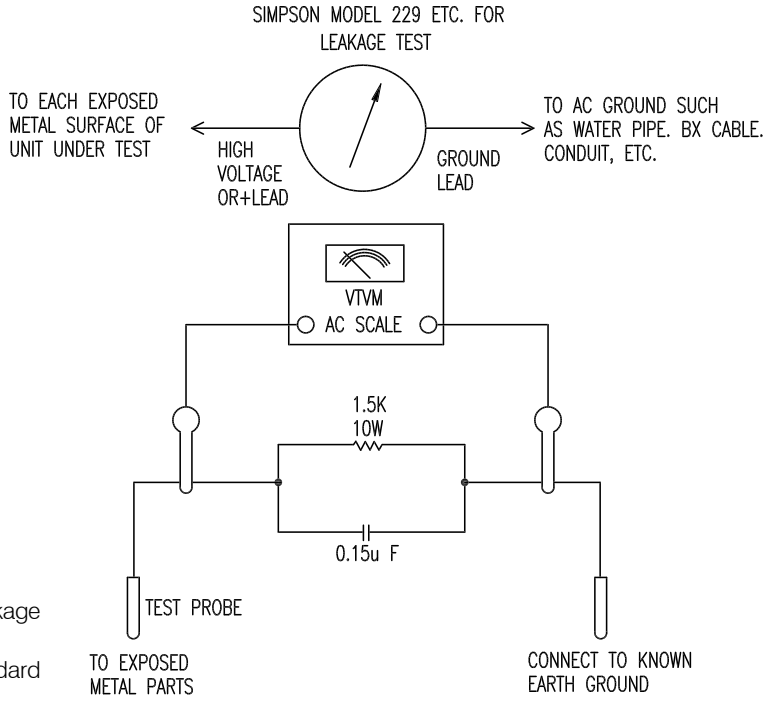
Each precaution in this manual should be followed during servicing.

Components identified with the IEC symbol ⚠ in the parts list are special significance to safety. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings or resistance, wattage, or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before retuming the product to the customer.

LEAKAGE TEST(FOR SERVICE ENGINEERS IN THE U.S.A)

Before returning the unit to the user, perform the following safety checks :

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the unit.
2. Be sure that any protective devices such as nonmetallic control knobs, insulating fish-papers, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc. Which were removed for the servicing are properly re-installed.
3. Be sure that no shock hazard exists ; check for leakage current using Simpson Model 229 Leakage Tester, standard equipment item No. 21641, RCA Model WT540A or use alternate method as follows : Plug the power cord directly Into a 120 volt AC receptacle (do not use an Isolation Transformer for this test). Using two clip leads, connect a 1500 ohms, 10watt Resistor paralleled by a 0.15uF capacitor, in series with all exposed metal cabinet parts and a known earth ground, such as a water pipe or conduit. Use a VTVM or VOM with 1000 ohms per volt, or higher sensitivity to measure the AC voltage drop across the resistor. (See diagram) Move the resistor connection to each exposed metal part having a return path to the chassis (antenna, metal, cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor. (This test should be performed with the 0.35 volt RMS or more is excessive and indicates a potential shock hazard which must be corrected before returning the unit to the owner.



AVR 430 TECHNICAL SPECIFICATIONS

Audio Section

Stereo Mode

Continuous Average Power (FTC)

80 Watts per channel, 20Hz–20kHz,
@ <0.07% THD, both channels driven into 8 ohms

Seven-Channel Surround Modes
Power per Individual Channel

Front L&R channels:
65 Watts per channel
@ <0.07% THD, 20Hz–20kHz into 8 ohms

Center channel:
65 Watts @ <0.07% THD, 20Hz–20kHz into 8 ohms

Surround (L & R Side, L & R back) channels:
65 Watts per channel
@ <0.07% THD, 20Hz–20kHz into 8 ohms

Input Sensitivity/Impedance	
Linear (High-Level)	200mV/47k ohms
Signal-to-Noise Ratio (IHF-A)	95dB
Surround System Adjacent Channel Separation	
Pro Logic I/II	40dB
Dolby Digital (AC-3)	55dB
DTS	55dB
Frequency Response	
@ 1W (+0dB, –3dB)	10Hz – 130kHz
High Instantaneous Current Capability (HCC)	±40 Amps
Transient Intermodulation Distortion (TIM)	Unmeasurable
Slew Rate	40V/µsec

FM Tuner Section

Frequency Range	87.5–108.0MHz
Usable Sensitivity	IHF 1.3µV/13.2dBf
Signal-to-Noise Ratio	Mono/Stereo 70/68dB
Distortion	Mono/Stereo 0.2/0.3%
Stereo Separation	40dB @ 1kHz
Selectivity	±400kHz, 70dB
Image Rejection	80dB
IF Rejection	90dB

AM Tuner Section

Frequency Range	520–1720kHz
Signal-to-Noise Ratio	45dB
Usable Sensitivity	Loop 500µV
Distortion	1kHz, 50% Mod 0.8%
Selectivity	±10kHz, 30dB

Video Section

Television Format	NTSC
Input Level/Impedance	1Vp-p/75 ohms
Output Level/Impedance	1Vp-p/75 ohms
Video Frequency Response (Composite and S-Video)	10Hz–8MHz (–3dB)
Video Frequency Response (Component Video)	10Hz–50MHz (–3dB)

General

Power Requirement	AC 120V/60Hz	
Power Consumption	59W idle, 940W at rated power output (7 channels driven)	
Dimensions	Product	Shipping
Width	17.3 inches (440mm)	20.1 inches (510mm)
Height	6.5 inches (165mm)	10 inches (254mm)
Depth	17.1 inches (435mm)	22.2 inches (565mm)
Weight	39 lb (17.7kg)	45 lb (20.4kg)

Depth measurement includes knobs, buttons and terminal connections.
Height measurement includes feet and chassis.
All features and specifications are subject to change without notice.

Harman Kardon, Power for the Digital Revolution and Logic 7 are registered trademarks of Harman International Industries, Incorporated.

EzSet® is a trademark of Harman International Industries, Incorporated (patent no. 5,386,478).

*Manufactured under license from Dolby Laboratories. "Dolby," "Pro Logic" and the Double-D symbol are trademarks of Dolby Laboratories.

DTS, DTS Surround, DTS-ES and DTS Neo:6 are registered trademarks of Digital Theater Systems, Inc.

VMAx is a registered trademark of Harman International Industries, Incorporated, and is an implementation of Cooper Bauck Transaural Stereo under patent license.

A-BUS and A-BUS/Ready are registered trademarks of Leisure Tech Electronics Pty Ltd. Australia.

TiVo is a registered trademark of TiVo, Inc.

Replay TV is a registered trademark of SONICblue, Inc.

AVR 630 TECHNICAL SPECIFICATIONS

Audio Section

Stereo Mode

Continuous Average Power (FTC)

90 Watts per channel, 20Hz–20kHz,
@ <0.07% THD, both channels driven into 8 ohms

Seven-Channel Surround Modes
Power per Individual Channel

Front L&R channels:
75 Watts per channel
@ <0.07% THD, 20Hz–20kHz into 8 ohms

Center channel:
75 Watts @ <0.07% THD, 20Hz–20kHz into 8 ohms

Surround (L & R Side, L & R back) channels:
75 Watts per channel
@ <0.07% THD, 20Hz–20kHz into 8 ohms

Input Sensitivity/Impedance	
Linear (High-Level)	200mV/47k ohms
Signal-to-Noise Ratio (IHF-A)	95dB
Surround System Adjacent Channel Separation	
Pro Logic I/II	40dB
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DTS	55dB
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@ 1W (+0dB, –3dB)	10Hz – 130kHz
High Instantaneous Current Capability (HCC)	±50 Amps
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Slew Rate	40V/µsec

FM Tuner Section

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Usable Sensitivity	IHF 1.3µV/13.2dBf
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Selectivity	±400kHz, 70dB
Image Rejection	80dB
IF Rejection	90dB

AM Tuner Section

Frequency Range	520–1720kHz
Signal-to-Noise Ratio	45dB
Usable Sensitivity	Loop 500µV
Distortion	1kHz, 50% Mod 0.8%
Selectivity	±10kHz, 30dB

Video Section

Television Format	NTSC
Input Level/Impedance	1Vp-p/75 ohms
Output Level/Impedance	1Vp-p/75 ohms
Video Frequency Response (Composite and S-Video)	10Hz–8MHz (–3dB)
Video Frequency Response (Component Video)	10Hz–50MHz (–3dB)

General

Power Requirement	AC 120V/60Hz	
Power Consumption	59W idle, 1000W at rated power output (7 channels driven)	
Dimensions	Product	Shipping
Width	17.3 inches (440mm)	20.1 inches (510mm)
Height	6.5 inches (165mm)	10 inches (254mm)
Depth	17.1 inches (435mm)	22.2 inches (565mm)
Weight	41 lb (18.6kg)	47 lb (21.4kg)

Depth measurement includes knobs, buttons and terminal connections.
Height measurement includes feet and chassis.
All features and specifications are subject to change without notice.

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HDCD system manufactured under license from Pacific Microsonics, Inc. This product is covered by one or more of the following: in the USA: 5,479,168; 5,638,074; 5,640,161; 5,808,574; 5,838,274; 5,854,600; 5,864,311; 5,872,531; and in Australia: 669114. Other patents pending.

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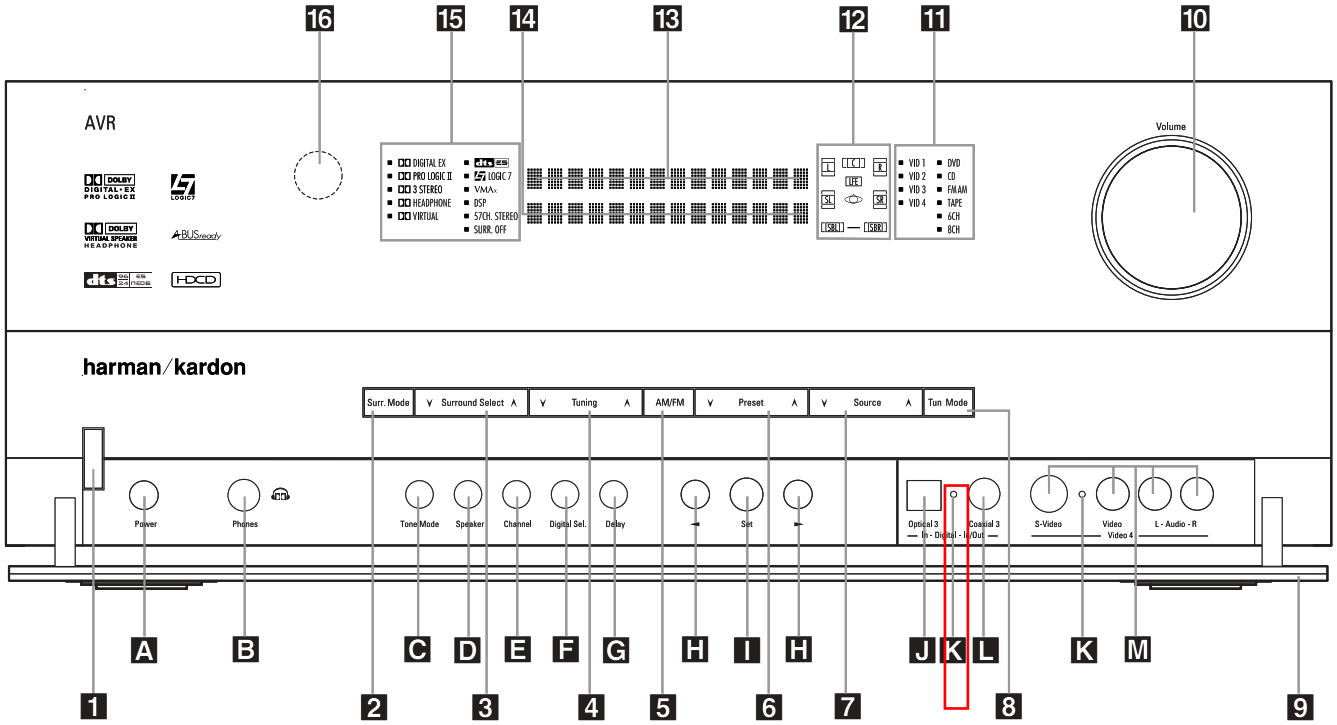
= AVR630 only feature

FRONT-PANEL CONTROLS



NOTE: To make it easier to follow the instructions that refer to this illustration, a larger copy may be downloaded from the Product Support section for this product at www.harmankardon.com.

The following controls and indicators are available on the AVR front panel:

1 Standby/On Switch
2 Surround Mode Group Selector
3 Surround Mode Selector
4 Tuning Selector
5 Tuner Band Selector
6 Preset Station Selector
7 Input Source Selector
8 Tuning Mode Selector
9 Front Panel Control Door
10 Volume Control
11 Input Indicators
12 Speaker/Channel Input Indicators
13 Upper Display Line
14 Lower Display Line
15 Surround Mode Indicators
16 Remote Sensor Window

The following controls and jacks are located behind the front-panel door. To open the door, place the edge of a finger on the left or right edge of the panel and gently swing the door down towards you.

A Main Power Switch
B Headphone Jack
C Tone Mode Button
D Speaker Selector Button
E Channel Adjust Selector
F Digital Input Selector
G Delay Adjust Selector
H ◀/▶ Buttons
I Set Button
J Optical 3 Digital Input
K Input/Output Status Indicators
L Coaxial 3 Digital Jack
M Video 4 Audio/Video Jacks

1 Standby/On Switch: When the **Main Power Switch A** is "ON," press this button to turn on the AVR ; press it again to turn the unit off. Note that the illumination surrounding the switch will turn blue when the unit is on.

2 Surround Mode Group Selector: Press this button to select the top-level group of surround modes. Each press of the button will select one of the surround mode categories. Once the button is pressed so that the name of the desired surround mode category appears in the on-screen display and in the **Lower Display Line 14**, press the **Surround Mode Selector 3** to cycle through the individual modes available. For example, press this button to select Dolby modes, and then press the **Surround Mode Selector 3** to choose from the various mode options.

3 Surround Mode Selector: Press this button to select from among the available surround mode options for the surround mode category selected. The specific modes will vary based on the number of speakers available, the surround mode category and whether the input source is digital or analog. For example, press the **Surround Mode Group Selector 2** to select a category such as Dolby or Logic 7, and then press this button to see the specific mode choices that are available.

FRONT-PANEL CONTROLS

4 Tuning Selector: Press the left side of the button to tune lower-frequency stations and the right side of the button to tune higher-frequency stations. When the tuner is in the MANUAL/MONO mode, each tap of the Selector will increase or decrease the frequency by one increment. When the tuner receives a strong-enough signal for adequate reception, MANUAL TUNED will appear in the **Lower Display Line 14** and in the on-screen display. When the tuner is in the AUTO/STEREO mode, press the button once, and the tuner will scan for a station with acceptable signal strength. When the next higher or lower frequency station with a strong-enough signal is tuned, the frequency scan will stop and the **Lower Display Line 14** and the on-screen display will indicate AUTO TUNED. When an FM Stereo station is tuned, the display will read AUTO ST TUNED.

5 Tuner Band Selector: Pressing this button will automatically switch the AVR to the Tuner mode. Pressing it again will switch between the AM and FM frequency bands.

6 Preset Station Selector: Press this button to scroll up or down through the list of stations that have been entered into the preset memory.

7 Input Source Selector: Press this button to change the input by scrolling up or down through the list of input sources.

8 Tuning Mode Selector: Press this button to select Auto or Manual tuning. When the button is pressed so that AUTO/STEREO appears in the **Upper Display Line 13**, the tuner will search for the next station with an acceptable signal when the **Tuning Selector 4 23 E** is pressed. When the button is pressed so that MANUAL/MONO appears in the **Upper Display Line 13**, each press of the **Tuning Selector 4 23 E** will increase the frequency. This button may also be used to switch between Stereo and Mono modes for FM radio reception. When weak reception is encountered, select the Manual/Mono tuning mode. Press and hold again to switch back to Stereo mode. (

9 Front-Panel Control Door: To open the door so that the front-panel jacks and controls behind this door may be accessed, gently pull the door down and towards you using either upper corner of the door.

10 Volume Control: Turn this knob clockwise to increase the volume, counterclockwise to decrease the volume. If the AVR s muted, adjusting the volume control will automatically release the unit from the silenced condition.

11 Input Indicators: One of these indicators will light to identify the currently selected input. Note that the entire list will light briefly each time the unit is turned on as a test.

12 Speaker/Channel Input Indicators: These indicators are multipurpose, indicating both the speaker type selected for each channel and the incoming data-signal configuration. The left, center, right, right surround and left surround speaker indicators are composed of three boxes, while the subwoofer is a single box. The center box lights when a "small" speaker is selected, and the two outer boxes light when "large" speakers are selected. When none of the boxes are lit for the center, surround or subwoofer channels, no speaker has been assigned that position.

The letters inside each box displays the active input channels. For standard analog inputs, only the L and R will light, indicating a stereo input. For a digital source, the indicators will light to display the channels being received at the digital input. When the letters flash, the digital input has been interrupted.

13 Upper Display Line: Depending on the unit's status, a variety of messages will appear here. In normal operation, this line will show the current input source and identify whether an analog or digital input is in use. When the tuner is selected as the input, this line will identify the station as AM or FM and show the frequency and preset number, if any.

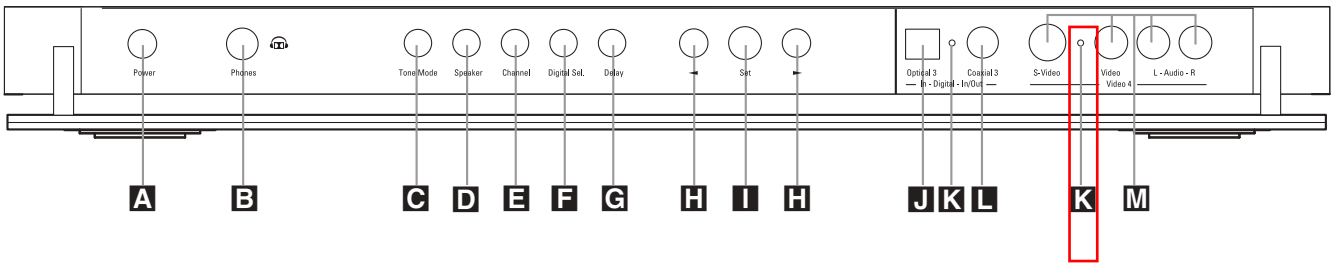
14 Lower Display Line: Depending on the unit's status, a variety of messages will appear here. In normal operation, the current surround mode will appear on this line.

15 Surround Mode Indicators: One of these indicators will light to show the surround mode in use. Depending on the specific combination of input sources and surround mode selected, more than one indicator may light.

16 Remote Sensor Window: The sensor behind this window receives infrared signals from the remote control. Aim the remote at this area and do not block or cover it unless an external remote sensor is installed.

= AVR630 only feature

FRONT-PANEL CONTROLS



The following controls and jacks are located behind the front-panel door. To open the door, place the edge of a finger on the left or right edge of the panel and gently swing the door down towards you.

A Main Power Switch: Press this switch to apply power to the AVR . When the switch is pressed in, the unit is placed in a Standby mode, as indicated by the amber illumination surrounding the **Standby/On Switch 1**. This button MUST be pressed in to operate the unit. To turn the unit off and prevent the use of the remote control, this switch should be pressed until it pops out from the front panel so that the word "OFF" may be read at the top of the switch.

NOTE: This switch is normally left in the "ON" position.

B Headphone Jack: This jack may be used to listen to the AVR 's output through a pair of headphones. Be certain that the headphones have a standard 1/4" stereo phone plug, or that you use an adapter, as needed, to convert the plug on your headphones to the 1/4" jack used on the AVR. When the headphone jack is in use, the main room speakers will automatically be turned off and the unit will output a standard stereo signal. You may also use one of the Dolby Headphone modes for an enhanced listening experience.

C Tone Mode Button: This button controls the tone mode settings, enabling adjustment of the bass and treble boost/cut. You may also use it to take the tone controls out of the signal path completely for "flat" response. The first press of the button displays a TONE MODE message in the **Lower Display Line 14** and in the on-screen display. To take the controls out of the signal path, press either of the ◀/▶ **Buttons H** until the display reads TONE OUT. To change the bass or treble settings, press the button again until the desired option appears in the **Lower Display Line 14** and in the on-screen display and then press either of the ◀/▶ **Buttons H** to enter the desired boost or cut setting.

D Speaker Selector Button: Press this button to begin the process of configuring the AVR for the type of speakers it is being used with.

E Channel Adjust Selector: Press the button to begin the process of adjusting the channel level outputs using the source currently playing through your AVR.

F Digital Input Selector: Press this button to begin the process of selecting a digital source for use with the currently selected input. Once the button has been pressed, use the ◀/▶ **Buttons H** to choose the desired input and then press the **Set Button I** to enter the setting into the unit's memory. See page 30 for more information on digital audio.

G Delay Adjust Selector: Press this button to begin the process of adjusting the delay settings for Dolby surround modes.

H ◀/▶ Buttons: When making system configuration changes using the front-panel controls, press these button to scroll through the available choices for the option being adjusted.

I Set Button: When making system configuration changes using the front-panel controls, press this button to enter a setting into the unit's memory.

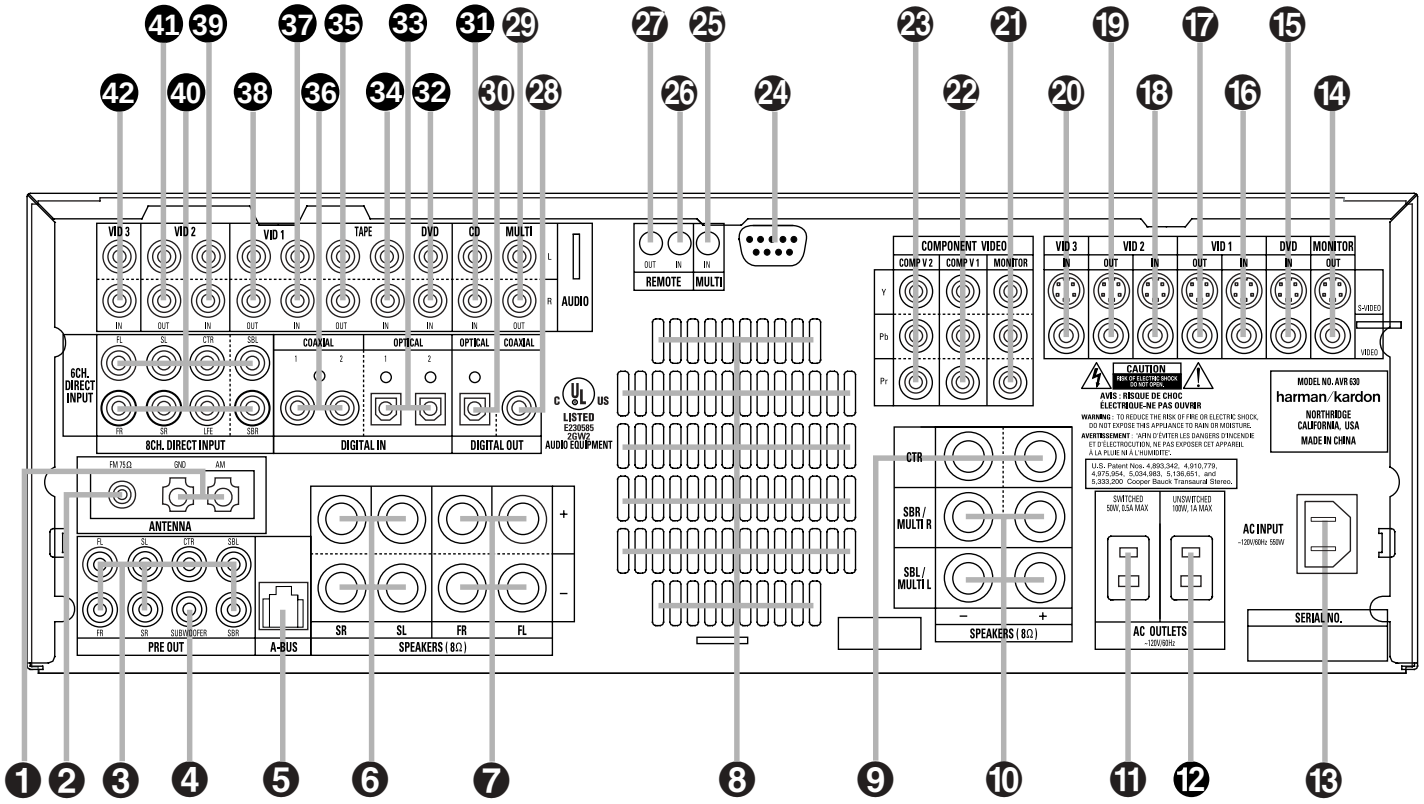
J Optical 3 Digital Input: Connect the optical digital output of an audio or video product to this jack.

K Input/Output Status Indicators: These LED indicators will normally light green to show that the front-panel **Coaxial 3 Digital Jack L** and **Video 4 Input/Output Jacks M** are operating as inputs. When these jacks are configured for use as an output, the appropriate indicator will turn red to show that the jack may be used as an output for recording.

L Coaxial 3 Digital Jack: Connect the coaxial digital input or output for a digital audio product such as a portable audio player or video game to this jack. The jack is normally an input, but may be switched to an output for recording using the menu system.

M Video 4 Input/Output Jacks: These audio/video jacks may be used as either an input or output for temporary connection to video games or portable audio/video products such as camcorders and portable audio players.

REAR-PANEL CONNECTIONS



1. AM Antenna
2. FM Antenna
3. Preamp Outputs
4. Subwoofer Output
5. A-BUS Connector
6. Surround Speaker Outputs
7. Front Speaker Outputs
8. Fan Vents
9. Center Speaker Outputs
10. Surround Back/Multiroom Speaker Outputs
11. Switched AC Accessory Outlet
12. Unswitched AC Accessory Outlet
13. AC Power Cord Jack
14. Video Monitor Outputs
15. DVD Video Inputs
16. Video 1 Video Inputs
17. Video 1 Video Outputs
18. Video 2 Video Inputs
19. Video 2 Video Outputs
20. Video 3 Video Inputs
21. Component Video Monitor Outputs
22. Component Video 1 Inputs
23. Component Video 2 Inputs
24. RS-232 Port
25. Multiroom IR Input
26. Remote IR Input
27. Remote IR Output
28. Coaxial Digital Audio Output
29. Multiroom Audio Outputs
30. Optical Digital Audio Output
31. CD Audio Inputs
32. DVD Audio Inputs
33. Optical Digital Audio Inputs
34. Tape Inputs
35. Tape Outputs
36. Coaxial Digital Audio Inputs
37. Video 1 Audio Inputs
38. Video 1 Audio Outputs
39. Video 2 Audio Inputs
40. 8-Channel Direct Inputs
41. Video 2 Audio Outputs
42. Video 3 Audio Inputs

NOTE: To make it easier to follow the instructions that refer to this illustration, a larger copy may be downloaded from the Product Support section for this product at www.harmankardon.com.

NOTE: To assist in making the correct connections for multichannel input, output and speaker connections, all connection jacks and terminals are color-coded in conformance with the CEA standards as follows:

Front Left:	White
Front Right:	Red
Center:	Green
Surround Left:	Blue
Surround Right:	Gray
Surround Back Left:	Brown
Surround Back Right:	Tan
Subwoofer:	Purple
Digital Audio:	Orange
Composite Video:	Yellow
Component Video "Y":	Green
Component Video "Pr":	Red
Component Video "Pb":	Blue

REAR-PANEL CONNECTIONS

❶ **AM Antenna:** Connect the AM loop antenna supplied with the receiver to these terminals. If an external AM antenna is used, make connections to the **AM** and **GND** terminals in accordance with the instructions supplied with the antenna.

❷ **FM Antenna:** Connect the supplied indoor or an optional external FM antenna to this terminal.

❸ **Preamp Outputs:** Connect these jacks to an optional, external power amplifier for applications where higher power is desired.

❹ **Subwoofer Output:** Connect this jack to the line-level input of a powered subwoofer. If an external subwoofer amplifier is used, connect this jack to the subwoofer amplifier input.

❺ **A-BUS Connector:** Connect this jack to an optional A-BUS®-certified remote room keypad or amplifier to extend the multiroom capabilities of your AVR 630.

❻ **Surround Speaker Outputs:** Connect these outputs to the matching + and – terminals on your surround channel speakers. In conformance with the CEA color-code specification, the blue terminal is the positive, or "+" terminal that should be connected to the red (+) terminal on the Surround Left speaker with older color-coding, while the gray terminal should be connected to the red (+) terminal on the Surround Right speaker with the older color-coding. Connect the black (–) terminal on the AVR to the matching black negative (–) terminals for each surround speaker.

❼ **Front Speaker Outputs:** Connect these outputs to the matching + or – terminals on your left and right speakers. When making speaker connections always make certain to maintain correct polarity by connecting the color-coded (white for front left and red for front right) (+) terminals on the AVR to the red (+) terminals on the speakers and the black (–) terminals on the AVR to the black (–) terminals on the speakers.

❽ **Fan Vents:** These ventilation holes are the output of the AVR 's airflow system. To ensure proper operation of the unit and to avoid possible damage to delicate surfaces, make certain that these holes are not blocked and that there is at least three inches of open space between the vent holes and any wooden or fabric surface. It is normal for the fan to remain off at most normal volume levels. An automatic temperature sensor turns the fan on only when it is needed.

❾ **Center Speaker Outputs:** Connect these outputs to the matching + and – terminals on your center channel speaker. In conformance with the CEA color-code specification, the green terminal is the positive, or "+" terminal that should be connected to the red (+) terminal on speakers with the older color-coding. Connect the black (–) terminal on the AVR to the black negative (–) terminal on your speaker.

❿ **Surround Back/Multiroom Speaker Outputs:** These speaker terminals are normally used to power the surround back left/surround back right speakers in a 7.1 channel system. However, they may also be used to power the speakers in a second zone, which will receive the output selected for a multiroom system. To change the output fed to these terminals from the default of the Surround Back speakers to the Multiroom Output, you must change a setting in the Advanced Menu of the OSD system.

In normal surround system use, the brown and black terminals are the surround back left channel positive (+) and negative (–) connections and the tan and black terminals are the surround back right positive (+) and negative (–) terminals. For multiroom use, connect the brown and black SBL terminals to the red and black connections on the left remote zone speaker and connect the tan and black SBR terminals to the red and black terminals on the right remote zone speaker.

⓫ **Switched AC Accessory Outlet:** These outlets may be used to power any device you wish to have turned on when the AVR is turned on with the **Standby/On Switch** **1**.

⓬ **Unswitched AC Accessory Outlet:** This outlet may be used to power any AC device. The power will remain on at this outlet regardless of whether the AVR is on or off.

NOTE: The total power consumption of all devices connected to the accessory outlets should not exceed 100 watts.

⓭ **AC Power Cord Jack:** Connect the AC power cord to this jack when the installation is complete. To ensure safe operation, use only the power cord supplied with the unit. If a replacement is required, it must be of the same type and capacity.

⓮ **Video Monitor Outputs:** Connect these jacks to the composite or S-Video input of a TV monitor or video projector to view the on-screen menus and the output of any standard video source selected by the receiver's video switcher.

⓯ **DVD Video Inputs:** Connect the composite or S-Video outputs of a DVD player or other video source to these jacks.

⓰ **Video 1 Video Inputs:** Connect the composite or S-Video PLAY/OUT jacks of a VCR or other video source to these jacks.

⓱ **Video 1 Video Outputs:** Connect the composite or S-Video REC/IN jacks of a VCR or other video recording device such as a DVD recorder or PVR to these jacks.

⓲ **Video 2 Video Inputs:** Connect the composite or S-Video PLAY/OUT jacks of a VCR or other video source to these jacks.

⓳ **Video 2 Video Outputs:** Connect the composite or S-Video REC/IN jacks of a VCR or other video recording device such as a DVD recorder or PVR to these jacks.

⓴ **Video 3 Video Inputs:** Connect the composite or S-Video PLAY/OUT jacks of a VCR or other video source to these jacks.

㉑ **Component Video Monitor Outputs:** Connect these outputs to the component video inputs of a video projector or monitor. When a source connected to one of the **Component Video Inputs** ㉒㉓ is selected the signal will be sent to these jacks.

㉒ **Component Video 1 Inputs:** These inputs may be used with any source device equipped with analog Y/Pr/Pb or RGB component video outputs. The factory default is for these jacks to be a linked to the DVD input, but you may change the setting at any time through the `IN/OUT SETUP` menu.

㉓ **Component Video 2 Inputs:** These inputs may be used with any video source device equipped with analog Y/Pr/Pb or RGB component video outputs. The factory default is for these jacks to be a linked to the Video 2 input, but you may change the setting at any time through the `IN/OUT SETUP` menu.

㉔ **RS-232 Port:** This jack may be used to control the AVR over a bi-directional RS-232 serial control link to a compatible computer or programmable remote control system. Due to the complexity of programming RS-232 commands we strongly recommend that connections to this port for control purposes be made by a trained and qualified technician. This jack may also link to a compatible computer to upgrade the software and operating system of the AVR when appropriate upgrades are available.

㉕ **Multiroom IR Input:** Connect the output of an IR sensor in a remote room to this jack to operate the AVR 's multiroom control system.

REAR-PANEL CONNECTIONS

㉖ **Remote IR Input:** If the AVR 's front-panel IR sensor is blocked due to cabinet doors or other obstructions, an external IR sensor may be used. Connect the output of the sensor to this jack.

㉗ **Remote IR Output:** This connection permits the IR sensor in the receiver to serve other remote controlled devices. Connect this jack to the "IR IN" jack on Harman Kardon (or other compatible) equipment.

㉘ **Coaxial Digital Audio Output:** Connect this jack to the coaxial digital input of a CD-R/RW, MiniDisc or other compatible digital recorder.

㉙ **Multiroom Audio Outputs:** Connect these jacks to the optional external audio power amplifier and video distribution system that delivers the source selected for multizone distribution.

㉚ **Optical Digital Audio Output:** Connect this jack to the optical digital input connector on a CD-R/RW, MiniDisc or other compatible digital recorder.

㉛ **CD Audio Inputs:** Connect these jacks to the left/right analog audio output of a compact disc player or CD changer or other audio source.

㉜ **DVD Audio Inputs:** Connect the left/right analog outputs of a DVD player or other audio source to these jacks.

㉝ **Optical Digital Audio Inputs:** Connect the optical digital output from a DVD player, HDTV receiver, the S/P-DIF output of a compatible computer sound card playing MP3 files or streams, LD player or CD player to these jacks. The signal may be a Dolby Digital signal, a DTS signal or a standard PCM digital source.

㉞ **Tape Inputs:** Connect these jacks to the Play/Oout jacks of an audio recorder.

㉟ **Tape Outputs:** Connect these jacks to the Record/Input jacks of an audio recorder.

㊱ **Coaxial Digital Audio Inputs:** Connect the coax digital output from a DVD player, HDTV receiver, the S/P-DIF output of a compatible computer sound card playing MP3 files or streams, LD player or CD player to these jacks. The signal may be a Dolby Digital signal, DTS signal or a standard PCM digital source. Do not connect the RF digital output of an LD player to these jacks.

㊲ **Video 1 Audio Inputs:** Connect the left/right PLAY/OUT audio output jacks on a VCR or other video source to these jacks.

㊳ **Video 1 Audio Outputs:** Connect the left/right REC/IN audio input jacks on a VCR or other video source to these jacks.

㊴ **Video 2 Audio Inputs:** Connect the left/right PLAY/OUT audio output jacks on a VCR or other video source to these jacks.

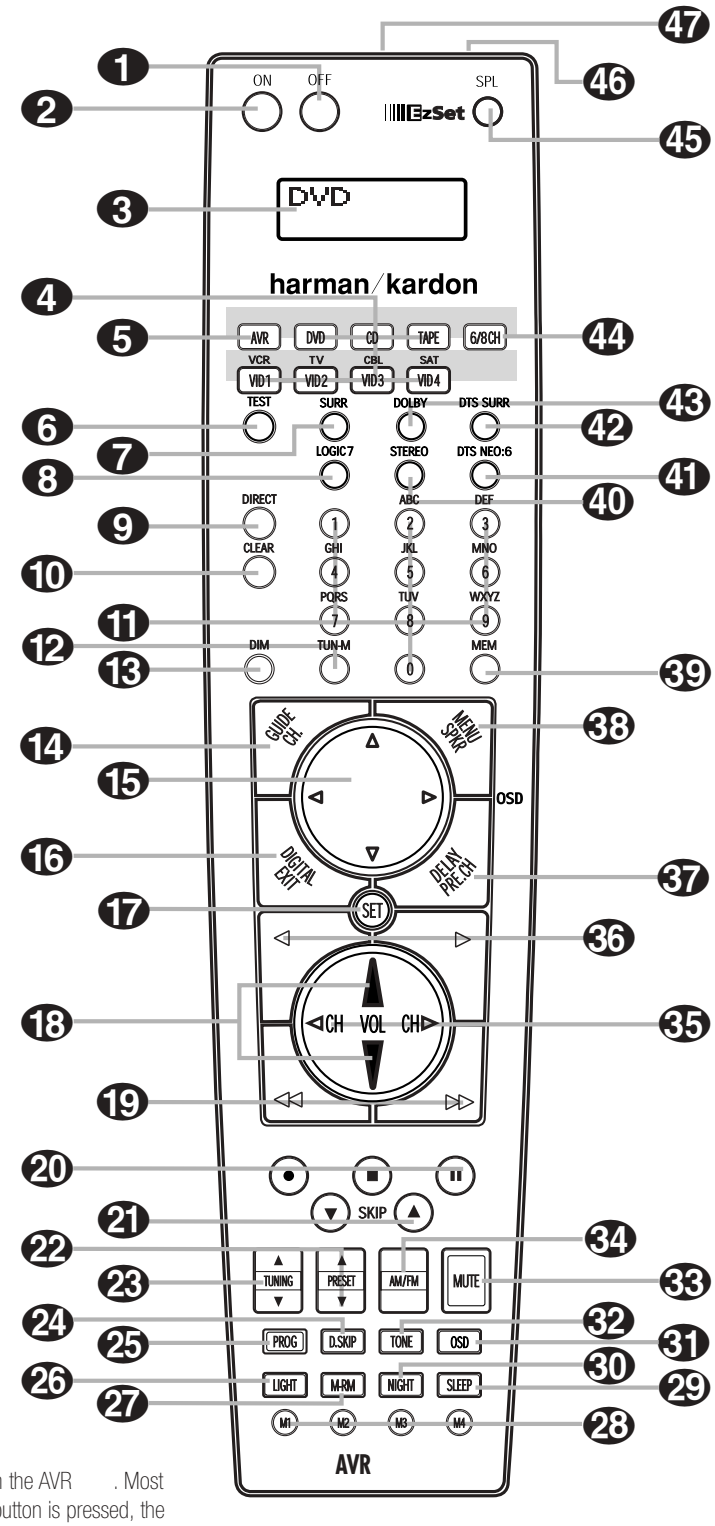
㊵ **8-Channel Direct Inputs:** These jacks are used for connection to source devices such as DVD-Audio or SACD players with discrete analog outputs. Depending on the source device in use, all eight jacks may be used, though in many cases only connections to the front left/right, center, surround left/right and LFE (subwoofer input) jacks will be used for standard 5.1 audio signals.

㊶ **Video 2 Audio Outputs:** Connect the left/right REC/IN audio input jacks on a VCR or other video source to these jacks.

㊷ **Video 3 Audio Inputs:** Connect the left/right PLAY/OUT audio output jacks on a VCR, PVR, cable set-top, satellite receiver, HDTV receiver or other video source to these jacks.

MAIN REMOTE CONTROL FUNCTIONS

1. Power Off Button
2. Power On Button
3. LCD Information Display
4. Input Selectors
5. AVR Selector
6. Test Button
7. DSP Surround Mode Selector
8. Logic 7 Mode Select Button
9. Direct Button
10. Clear Button
11. Numeric Keys
12. Tuning Mode Button
13. Dim Button
14. Channel Select Button
15. Navigation Button
16. Digital Select Button
17. Set Button
18. Volume Up/Down Selectors
19. Transport Fast-Play/Scan Buttons
20. Main Transport Controls
21. Track Skip Up/Down Buttons
22. Preset Up/Down Button
23. Tuning Up/Down Button
24. Disc Skip Button
25. Program Button
26. Light Button
27. Multiroom Button
28. Macro Buttons
29. Sleep Button
30. Night Mode Button
31. OSD Button
32. Tone Control Button
33. Mute Button
34. AM/FM Button
35. Channel Up/Down Selector
36. Transport Play Buttons
37. Delay Select Button
38. Speaker Select Button
39. Memory Button
40. Stereo Mode Select Button
41. DTS Neo:6 Mode Select Button
42. DTS Digital Mode Select Button
43. Dolby Mode Select Button
44. 6/8-Channel Input Select
45. SPL Select Button
46. EzSet Microphone Sensor
47. Lens



NOTES:

- The function names shown here are each button's feature when used with the AVR . Most buttons have additional functions when used with other devices. When a button is pressed, the function name will appear in the bottom line of the **LCD Information Display** 3.
- The jack on the upper right side of the remote is reserved for future use. Do not remove the plug provided or connect any device to the jack.
- To make it easier to follow the instructions that refer to this illustration, a larger copy may be downloaded from the Product Support section for this product at www.harmankardon.com.

MAIN REMOTE CONTROL FUNCTIONS

IMPORTANT NOTE: The AVR 's remote may be programmed to control up to eight devices, including the AVR . Before using the remote, it is important to remember to press the **Input Selector Button** ❹ that corresponds to the unit you wish to operate. In addition, the AVR 's remote is shipped from the factory to operate the AVR and most Harman Kardon CD or DVD players and cassette decks. The remote is also capable of operating a wide variety of other products using the control codes that are part of the remote.

It is also important to remember that many of the buttons on the remote take on different functions, depending on the product selected using the **Input Selectors** ❹. The descriptions shown here primarily detail the functions of the remote when it is used to operate the AVR

❶ **Power Off Button:** Press this button to place the AVR or a selected device in the Standby mode. Note that this will turn off the main room functions, but if the Multiroom system is activated, it will continue to function.

❷ **Power On Button:** Press this button to turn on the power to a device selected by first pressing one of the **Input Selectors** ❹.

❸ **LCD Information Display:** This two-line screen displays various information depending on the commands that have been entered into the remote.

❹ **Input Selectors:** Pressing one of these buttons will perform three actions at the same time. First, if the AVR is not turned on, this will power up the unit. Next, it will select the source shown on the button as the input to the AVR . Finally, it will change the remote control so that it controls the device selected. After pressing one of these buttons you must press the **AVR Selector Button** ❺ again to operate the AVR 's functions with the remote.

❺ **AVR Selector:** Pressing this button will switch the remote so that it will operate the AVR 's functions. If the AVR is in the Standby mode, it will also turn the AVR on.

❻ **Test Button:** Press this button to begin the sequence used to calibrate the AVR 's output levels.

❼ **DSP Surround Mode Selector:** Press this button to select one of the DSP surround modes, such as VMAx, Hall 1, Hall 2 or Theater. Each press of the button selects another mode.

❽ **Logic 7 Mode Select Button:** Press this button to select from among the available Logic 7 surround modes.

❾ **Direct Button:** Press this button when the tuner is in use to start the sequence for direct entry of a station's frequency. After pressing the button, simply press the proper **Numeric Keys** ⓫ to select a station.

❿ **Clear Button:** When programming the remote or using the EzSet feature, press this button to cancel the current function. When using the remote to enter frequencies for direct tuner access, press this button to clear previous entries.

⓫ **Numeric Keys:** These buttons serve as a ten-button numeric keypad to enter tuner preset positions. They are also used to select channel numbers when TV, Cable or SAT has been selected on the remote, or to select track numbers on a CD, DVD or LD player, depending on how the remote has been programmed. These buttons are also used to enter letters and numbers when renaming devices in the LCD Information Display.

⓬ **Tuning Mode Button:** Press this button to change the tuner mode between manual and automatic. When the button is pressed so that AUTO/STEREO appears in the **Upper Display Line** 13 and in the on-screen display, only stations with acceptable signal quality will be tuned, and the tuner will play FM stations in stereo, when available. In the **AUTO** mode, when the **Tuning Up/Down Buttons** 4 23 E are pressed, the unit will automatically search for the next available station with good signal strength. When this button is pressed so that MANUAL/MONO appears in the **Upper Display Line** 13 and in the on-screen display each press of the **Tuning Up/Down Buttons** 4 23 E will move the frequency up or down in single-step increments. When the FM band is in use, pressing the button so that the **MANUAL** mode is activated will enable you to tune stations with weak signals by changing to monaural reception.

⓭ **Dim Button:** Press this button to activate the Dimmer function, which reduces the brightness of the front-panel display, or turns it off entirely. Press the button once to change the display to reduce the brightness by 50%, and press it again within five seconds and the main display will go completely dark. Note that this setting is temporary; regardless of any changes, the display will always return to full brightness when the AVR is turned on. The blue illumination around the **Standby/On Switch** 1 will always remain at full brightness regardless of the setting to remind you that the AVR is still turned on. The blue accent lighting inside the volume control will also remain at full brightness when the panel is at 50%, but go out when the panel lights are fully dimmed.

⓮ **Channel Select Button:** This button is used to start the process of setting the AVR 's output levels to an external source. Once this button is pressed, press the ▲/▼ on the **Navigation Button** ⓯ to select the channel being adjusted, then press the **Set Button** ⓱, followed by the ▲/▼ on the **Navigation Button** ⓯ again, to change the level setting.

⓯ **Navigation Button:** This single disc-like button is used to navigate through the on-screen configuration menus, to scroll through the options list and to select choices for the various settings such as delay, speakers, surround modes, digital inputs, etc. To use the button, simply press it left, right, up or down in the direction indicated by the ▲▼◀▶ icons printed on the button disc. Depending on the menu being used, pressing the button will either change a specific menu or configuration choice or it will change the option shown in the on-screen or front-panel display. The sections in this manual describing the unit's individual features and configuration options contain specific information on how the navigation controls are used.

⓰ **Digital Select Button:** Press this button to assign one of the digital inputs 33 36 J L to a source.

⓱ **Set Button:** This button is used to enter settings into the AVR s memory. It is also used in the setup procedures for delay time, speaker configuration and channel output level adjustment.

⓲ **Volume Up/Down Buttons:** These controls share the common disc in the lower third of the remote. To raise the volume, press the button marked ▲ by pressing towards the top of the remote. To lower the volume, press the button marked ▼ by pressing towards the bottom of the remote. The ◀/▶ buttons on the left and right sides of this disc change channels up or down when the TV, cable box or satellite **Input Selectors** ❹ have been pressed.

MAIN REMOTE CONTROL FUNCTIONS

⓳ Transport Fast-Play/Scan Buttons: These buttons have no direct function on the AVR , but they are used when the remote is programmed for a compatible DVD, CD or tape player. Pressing these buttons will transmit a fast-play forward, fast-play reverse, or fast-forward or -reverse scan command, according to the capabilities of the player being controlled. In the factory default setting, these buttons are preprogrammed with the remote codes for Harman Kardon DVD players so that you may control a compatible player without having to switch devices.

⓴ Main Transport Controls: These buttons have no direct function on the AVR , but they are used when the remote is programmed for a compatible DVD, CD or tape player. Pressing these buttons will transmit a stop (■), record (●), or pause (II) command, according to the capabilities of the player being controlled. In the factory default setting, these buttons are programmed with the remote codes for Harman Kardon DVD players so that you may control a compatible player without having to switch devices.

㉑ Track Skip Up/Down Buttons: These buttons do not have a direct function with the AVR , but when used with a compatibly programmed CD or DVD changer will change the track or chapter currently being played. In the factory default setting, these buttons are programmed with the remote codes for Harman Kardon DVD players so that you may control a compatible player without having to switch devices.

㉒ Preset Up/Down Button: When the tuner is in use, press this button to scroll through the stations programmed into the AVR 's memory.

㉓ Tuning Up/Down Button: Press this button when the tuner is in use to change the station to one with a higher or lower frequency. When the tuner is in the MANUAL/MONO mode, each tap of the Selector will increase or decrease the frequency by one increment. When the tuner receives a strong-enough signal for adequate reception, MANUAL TUNED will appear in the **Lower Display Line 14** and in the on-screen display. When the tuner is in the AUTO/STEREO mode, press the button once, and the tuner will scan for a station with acceptable signal strength. When the next higher- or lower-frequency station with a strong enough signal is tuned, the frequency scan will stop and the **Lower Display Line 14** and the on-screen display will indicate AUTO TUNED. When an FM Stereo station is tuned, the display will read AUTO ST TUNED. See page 34 for more information on using the tuner.

㉔ Disc Skip Button: This button has no direct function for the AVR but may be used to change the disc in a CD or DVD changer when the remote is programmed for that type of device.

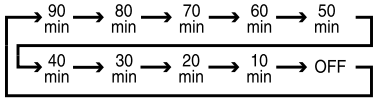
㉕ Program Button: This button is used to begin the process of programming the remote. Press and hold this button for three seconds to place the remote in the programming mode. Once the red LED under the **Set Button ⓱** lights, release the button. You may then select from the desired option.

㉖ Light Button: Press this button to activate the remote's backlight for ease of use in darkened rooms.

㉗ Multiroom Button: Press this button to begin the process of activating the multiroom system or to change the input or volume level for the second zone.

㉘ Macro Buttons: Press these buttons to store or recall a "Macro", which is a preprogrammed sequence of commands stored in the remote.

㉙ Sleep Button: Press this button to place the unit in the Sleep mode. After the time shown in the display, the AVR will automatically go into the Standby mode. Each press of the button changes the time until turn-off in the following order:



When the Sleep timer is in use the front panel displays indicators will dim to half brightness.

㉚ Night Mode Button: Press this button to activate the Night mode. This mode is available in specially encoded Dolby Digital sources, and it preserves dialogue (center channel) intelligibility at low volume levels.

㉛ OSD Button: Press this button to activate or turn off the On-Screen Display (OSD) system used to set up or adjust the AVR 's parameters.

㉜ Tone Control Button: This button controls the tone mode settings, enabling adjustment of the bass and treble boost/cut. You may also use it to take the tone controls out of the signal path completely for "flat" response. The first press of the button displays a TONE IN message in the **Lower Display Line 14** and in the on-screen display. To take the controls out of the signal path press either of the ▲/▼ **Navigation Buttons ⓯** until the display reads TONE OUT. To change the bass or treble settings, press the button again until the desired option appears in the **Lower Display Line 14** and in the on-screen display and then press either of the ▲/▼ **Navigation Buttons ⓯** to enter the desired boost or cut setting.

㉝ Mute Button: Press this button to momentarily silence the AVR or TV set being controlled, depending on which device has been selected.

㉞ AM/FM Button: Press this button to select the AVR 's tuner as the listening choice. Pressing this button when the tuner is already in use will select between the AM and FM bands.

㉟ Channel Up/Down Selector: This button has no function when the AVR is being controlled, but when programmed for use with a VCR, TV, cable box, satellite receiver or other similar product it will change the channel up or down.

㊱ Transport Play Buttons: These buttons have no direct function on the AVR , but they are used when the remote is programmed for a compatible DVD, CD or tape player. Pressing these buttons will transmit a forward- or reverse-play command, according to the capabilities of the player being controlled. In the factory default setting, these buttons are programmed for Harman Kardon DVD players so that you may control a compatible player without having to switch devices.

㊲ Delay Select Button: This button selects adjustments to the A/V Sync Delay and the individual channel displays. The first press of the button displays an A/V SYNC DELAY message in the **Lower Display Line 14** and in the on-screen display, which means that you may change the amount of time that all channels are delayed together behind the video. This enables you to compensate for the loss of lip sync that may be caused by digital video processing in your display or by television stations. To change the A/V Sync Delay, press the **Set Button ⓱** while the A/V SYNC DELAY message is visible and then use the ▲/▼ **Navigation Button ⓯** to change the setting so that the sound and the video image are in sync. To change the delay for an individual output channel, press the ▲/▼ **Navigation Button ⓯** until the desired channel name is shown, and then press the **Set Button ⓱**. Use the ▲/▼ **Navigation Buttons ⓯** to change the delay amount.

㊳ Speaker Select Button: Press this button to begin the process of configuring the AVR 630's bass management system. Then press the ▲/▼ **Navigation Button ⓯** to select the channel you wish to set up. Press the **Set Button ⓱** and then select another channel to configure. When all adjustments have been completed, press the **Set Button ⓱** twice to exit the settings and return to normal operation.

MAIN REMOTE CONTROL FUNCTIONS

39 Memory Button: Press this button to enter a radio station to the AVR 's preset memory. First, tune the desired station, and then press this button. Within five seconds of when you see the station's frequency flash in the **Upper Display Line 13** and in the on-screen display, press the numeric keys for the preset number between 01 and 30 that you wish to assign to the station.

40 Stereo Mode Select Button: Press this button to select a stereo listening mode. When the button is pressed so that SURROUND OFF appears in the **Lower Display Line 14**, the AVR will operate in a bypass mode with true, fully analog, two-channel left/right stereo mode with no surround processing or bass management, as opposed to other modes where digital processing is used. When the button is pressed so that SURROUND OFF appears in the **Lower Display Line 14**, and the DSP and SURROUND OFF **Surround Mode Indicators 15** are lit, you will enjoy a two-channel presentation of the sound along with the benefits of bass management. Depending on whether your system is configured for 5.1 or 6.1/7.1 channels, the next press of the button will cause either 5 CH STEREO or 7 CH STEREO to appear, and the stereo signal will be routed to all five (or seven) speakers.

41 DTS Neo:6 Mode Select Button: Press this button to select a DTS Neo:6 mode.

42 DTS Digital Mode Select Button: When a DTS-encoded digital source is playing, each press of this button will scroll through the available DTS modes. The specific choice of modes will vary according to the type of encoding on the disc and your system's speaker configuration. When a DTS source is not in use, this button has no function.

43 Dolby Mode Select Button: This button is used to select from the available Dolby Surround modes. Each press of this button will select one of the Dolby Pro Logic II modes or Dolby 3 Stereo. When a Dolby Digital-encoded source is in use, the Dolby Digital mode may also be selected.

44 6-Channel/8-Channel Input Select: Press this button to select the device connected to the **6-** or **8-Channel Direct Inputs 40**.

45 SPL Select Button: This button activates the EzSet function to quickly and accurately calibrate the AVR 's output levels. When the button is pressed you will then need to select between automatic EzSet operation or using the remote as a manual SPL meter by pressing the ▲/▼ **Navigation Button 15** until your choice appears in the remote's LCD display. Press the **Set Button 17** to enter the setting, and then follow the instructions as displayed in the LCD display.

46 EzSet Microphone Sensor: The microphone sensor that is used by the EzSet system is behind the three slots at the top of the remote control. When using EzSet to calibrate the AVR , be certain that the slots are not covered.

47 Lens: The infrared emitters behind the plastic lens at the top of the remote communicate the remote codes to the AVR . Be certain that the lens is not covered when using the remote, and point the lens toward the AVR for best results. In learning mode, the remote receives IR codes to be learned through a sensor behind the lens.

NOTE: DO NOT remove the rubber plug that is supplied to cover the jack on the upper right side of the remote. The jack is not active and is reserved for future use.

TROUBLESHOOTING GUIDE

SYMPTOM	CAUSE	SOLUTION
Unit does not function when Main Power Switch is pushed	• No AC Power	• Make certain AC power cord is plugged into a live outlet • Check to see whether outlet is switch-controlled
Display lights, but no sound or picture	• Intermittent input connections • **Mute** is on • Volume control is down	• Make certain that all input and speaker connections are secure • Press **Mute Button** 33 • Turn up volume control
Unit turns on, but front-panel display does not light up	• Display brightness is turned off	• Follow the instructions in the Display Brightness section on page 36 so that the display is set to VFD FULL
No sound from any speaker; light around power switch is red	• Amplifier is in protection mode due to possible short • Amplifier is in protection mode due to internal problems	• Check speaker wire connections for shorts at receiver and speaker ends • Contact your local Harman Kardon service center
No sound from surround or center speakers	• Incorrect surround mode • Input is monaural • Incorrect configuration • Stereo or Mono program material	• Select a mode other than Stereo • There is no surround information from mono sources • Check speaker mode configuration • The surround decoder may not create center- or rear-channel information from non-encoded programs
Unit does not respond to remote commands	• Weak batteries in remote • Wrong device selected • Remote sensor is obscured	• Change remote batteries • Press the AVR selector • Make certain front-panel sensor is visible to remote or connect remote sensor
Intermittent buzzing in tuner	• Local interference	• Move unit or antenna away from computers, fluorescent lights, motors or other electrical appliances
Letters flash in the channel indicator display and digital audio stops	• Digital audio feed paused	• Resume play for DVD • Check that Digital Input is selected

Processor Reset

In the rare case where the unit's operation or the displays seem abnormal, the cause may involve the erratic operation of the system's memory or microprocessor.

To correct this problem, first unplug the unit from the AC wall outlet and wait at least three minutes. After the pause, reconnect the AC power cord and check the unit's operation. If the system still malfunctions, a system reset may clear the problem.

To clear the AVR 's entire system memory including tuner presets, output level settings, delay times and speaker configuration data, first put the unit in Standby by pressing the **Standby/On Switch** 1. Next, press and hold the **Surround Mode Group Selector** 2 and the **Tuning Mode Selector** 8 buttons for three seconds.

The unit will turn on automatically and display the RESET message in the **Upper Display Line** 13.

NOTE: Resetting the processor will erase any configuration settings you have made for speakers, output levels, surround modes, digital input assignments as well as the tuner presets. After a reset the unit will be returned to the factory presets, and all settings for these items must be reentered.

If the system is still operating incorrectly, there may have been an electronic discharge or severe AC line interference that has corrupted the memory or microprocessor.

If these steps do not solve the problem, consult an authorized Harman Kardon service center.

SERVICE PROCEDURE

ALIGNMENT PROCEDURES

1.MAIN AMP idling Adjustment

SET CONDITION

1) SEMI VOLUME POSITION at MAIN/SURROUND AMP Board
MAIN:VR71.VR74
SURROUND:VR72.VR73

NO Signal/No Load
AC Line Voltage:120V/60Hz.230V/50Hz

2) After turning on the unit keep it over than 25min (keep the power/Driver TR as normal temperature)
3) Adjust the voltage value of primary&secondary of wafer to be 25mV by rotating the semi volume of each channel to the right

CHANNEL	ADJUSTMENT	MEASUREMENT	VOLTAGE
FRONT-L CH	VR-71	P801	23+/-2mV
FRONT-R CH	VR-74	P804	23+/-2mV
SURROUNT-L CH	VR-73	P803	23+/-2mV
SURROUNT-R CH	VR-72	P802	23+/-2mV

4) CAUTION .
In case that power TR or DRIVER TR is needed to be replace for repairing the corresponding channel should be adjusted again

FRONT AMP:Q433.Q435.Q437.Q439.Q330.Q332.Q334.Q336
SURROUND AMP:Q434.Q436.Q438.Q440.Q329.Q331.Q333.Q335

2.SURROUND BACK AMP idling Adjustment

SET CONDITION

1) SEMI VOLUME POSITION at CENTER/SURROUND BACK AMP Board
CENTER:VR32
SURROUND BACK:VR31.VR51

NO Signal/No Load
AC Line Voltage:120V/60Hz.230V/50Hz

2) After turning on the unit keep it over than 25min (keep the power/Driver TR as normal temperature)

3) Adjust the voltage value of primary&secondary of wafer to be 25mV by rotating the semi volume of each channel to the right

CHANNEL	ADJUSTMENT	MEASUREMENT	VOLTAGE
CENTER	VR-32	P308	23+/-2mV
SUR BACK-L CH	VR-31	P301	23+/-2mV
SUR BACK-R CH	VR-51	P309	23+/-2mV

4) CAUTION .
In case that power TR or DVIER TR is needed to be replace for repairing the corresponding channel should be adjusted again

CENTER AMP:Q416Q417.Q418.Q419
SUR BACK AMP:Q316.Q317.Q318.Q319.Q516.Q517.Q518.Q519

3.Cautions for main adjustment

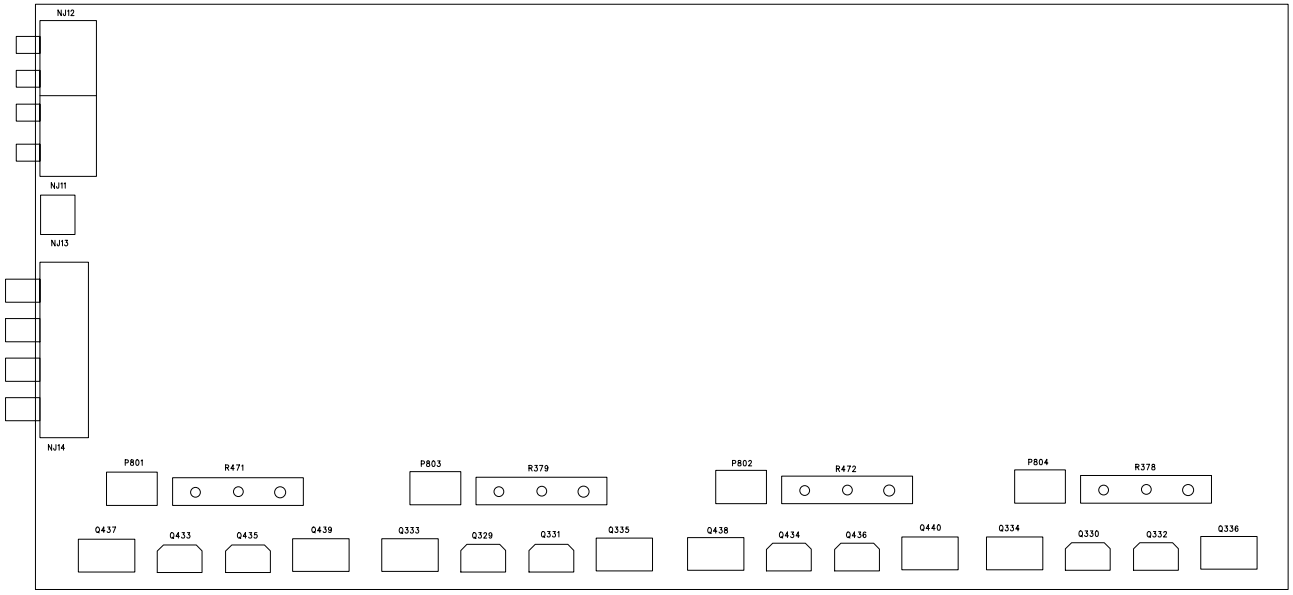
1) At MAIN/SURROUND BACK BOARD.use the below capacitor after discharging for sufficent time for preventing possible damage from electrical spark

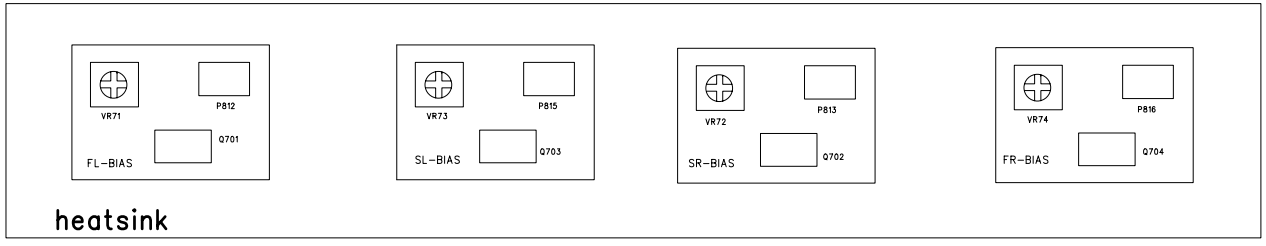
MAIN	C504.C505	AVR630 15000/63V
BOARD	C571.C572	AVR430 12000/63V
SUR BACK	C201.C202	AVR630 10000/63V
CENTER BOARD	C201.C202	AVR430 8200/63V

2)The checking for MAIN/SURR-BACK BOARD should have the discharging circuit discharge over 30sec.through(4R7Ohm 10W)resistor after push power sw off

REVISION RECORD			
NO.	Date		Contents

Allignmnent and test Position (Main amp Board)

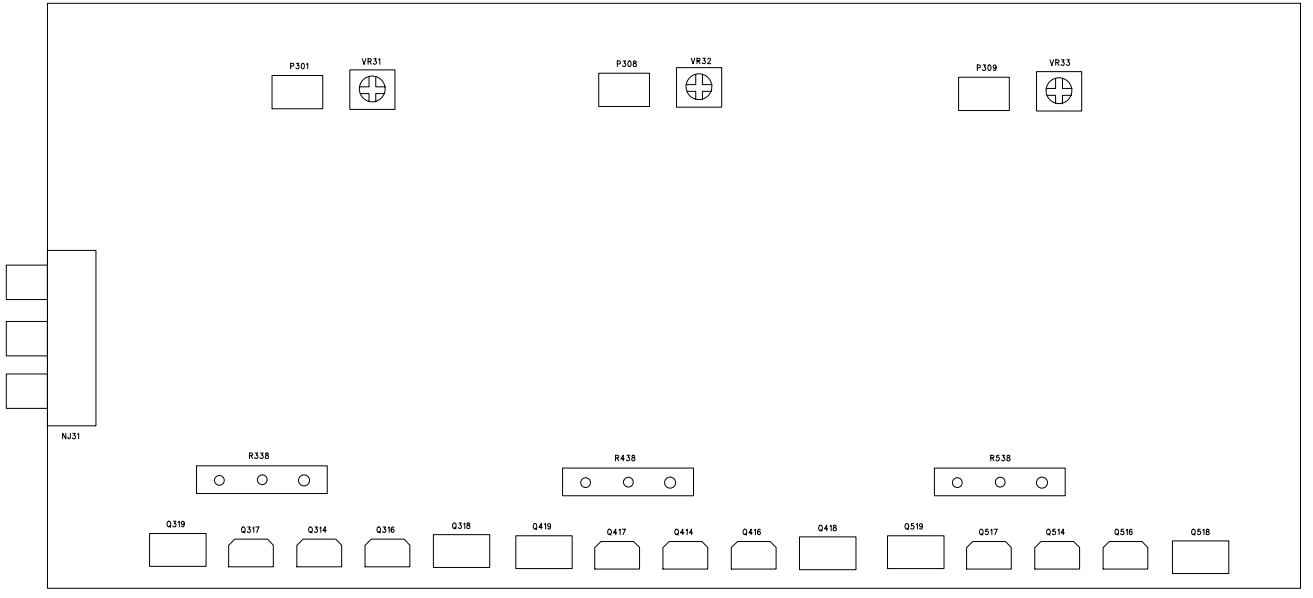




REVISION RECORD

NO.	Date	Contents

Allignmnent and test Position (3ch.sb-back amp board)



harman/kardon Service Bulletin

Service bulletin # HK2004-04 October 2004 Warranty labor rate: MAJOR repair

To: All harman/kardon Service Centers

Model: AVR430, AVR630

Subject: Rewiring Bias/Fan cables

In the event you receive an AVR430 or AVR630 with the complaint: "the unit intermittently goes in standby or the fan runs constantly" perform the following modification. Please note other component or connection failures can cause the unit to go in to standby.

Synopsis: Hard wire Bias/Fan cables (7 cables, 12 connectors) from Bias PCB's to main PCB, surround PCB. Recheck all bias voltages.

1) Remove the top cover
2) Remove the DSP and Processor boards.
3) Locate and identify Bias cables connecting Bias and Surround PCB's to main PCB:

MAIN PCB Location: P805, N801, N802, N803, N804
SURROUND PCB Location: N301, P307
BIAS PCB Location: P812, P813, P814, P815, P816

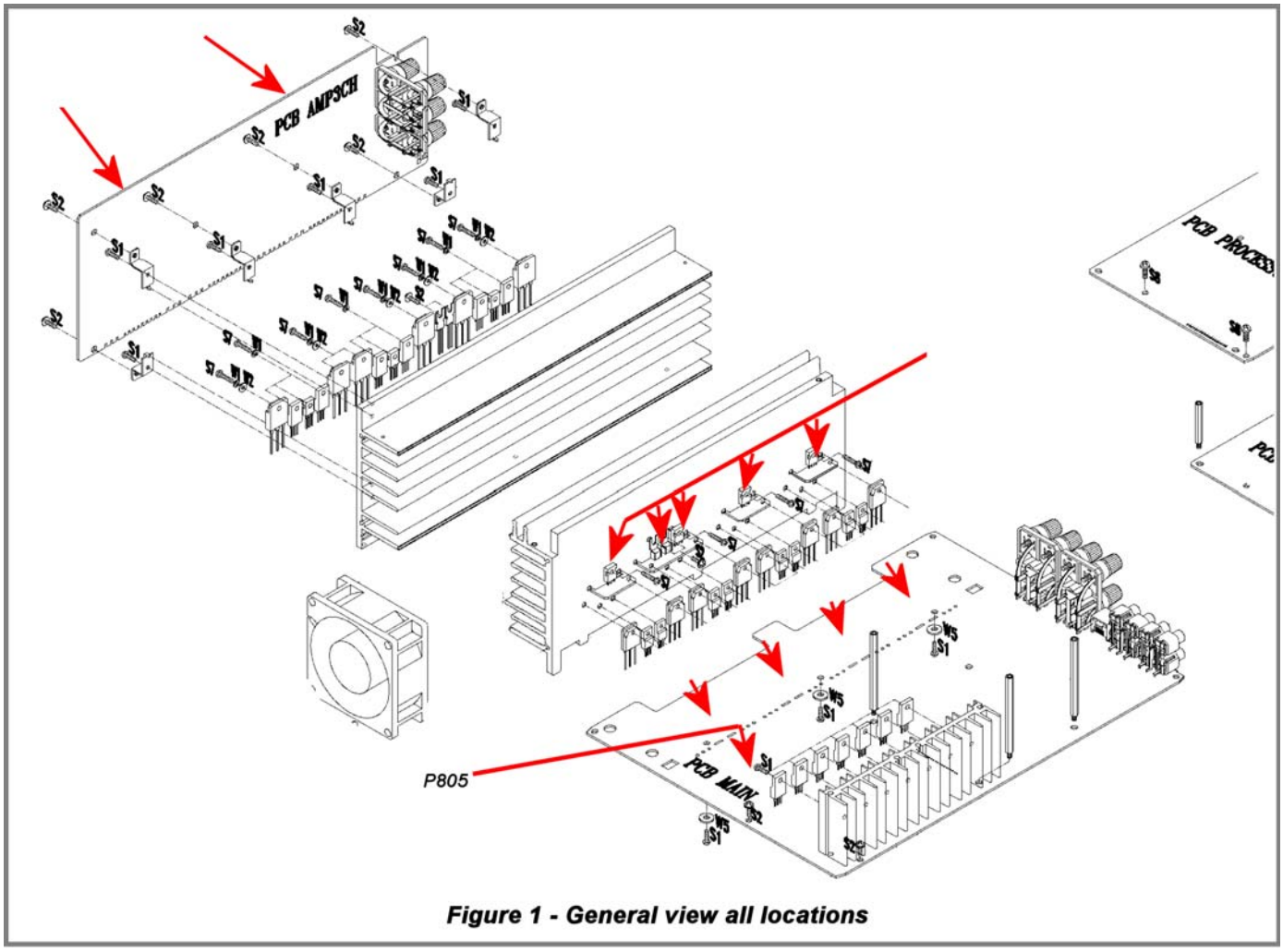
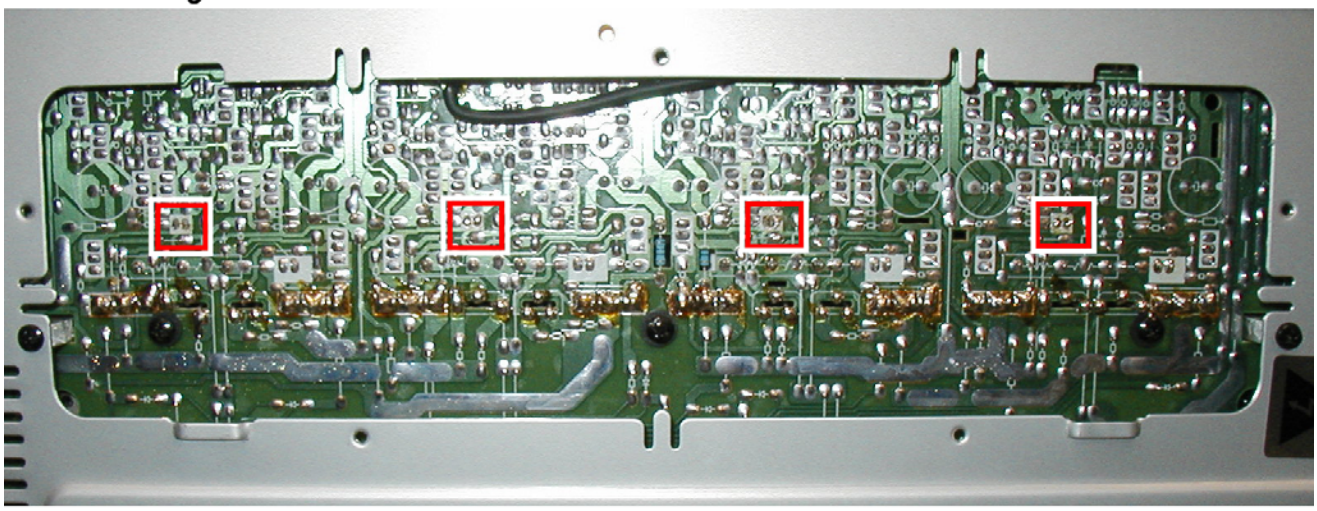


Figure 1 - General view all locations

4) Unplug each the cable on the Bias PCB, desolder the female plugs, cut the connectors off each wire, strip the insulation 1/8" on each end and solder directly to the PCB assembly in each location.
5) For locations N801, N802, N803, N804 on the Main PCB, set the unit on its side and remove the bottom grille. (See Figure 2) Desolder and remove each connector. Cut the connectors off each wire, strip the insulation 1/8" on each end and solder directly to the PCB assembly in each location.
6) For location P805 (see Figure 1) on the Main PCB, unplug the cable, carefully cut away the female plug with diagonal cutters on the PCB surface, leaving the three conductors intact. Cut the connector off each wire, strip the insulation 1/8" on each end, slide a piece of shrink tubing on each conductor and solder each wire directly to the three conductors on the PCB. Heat the shrink tubing to complete the connection, and add some silicon seal or similar adherent to affix the wires on the PCB.

Figure 2 BOTTOM OF MAIN PCB



Location of N801, N802, N803, N804

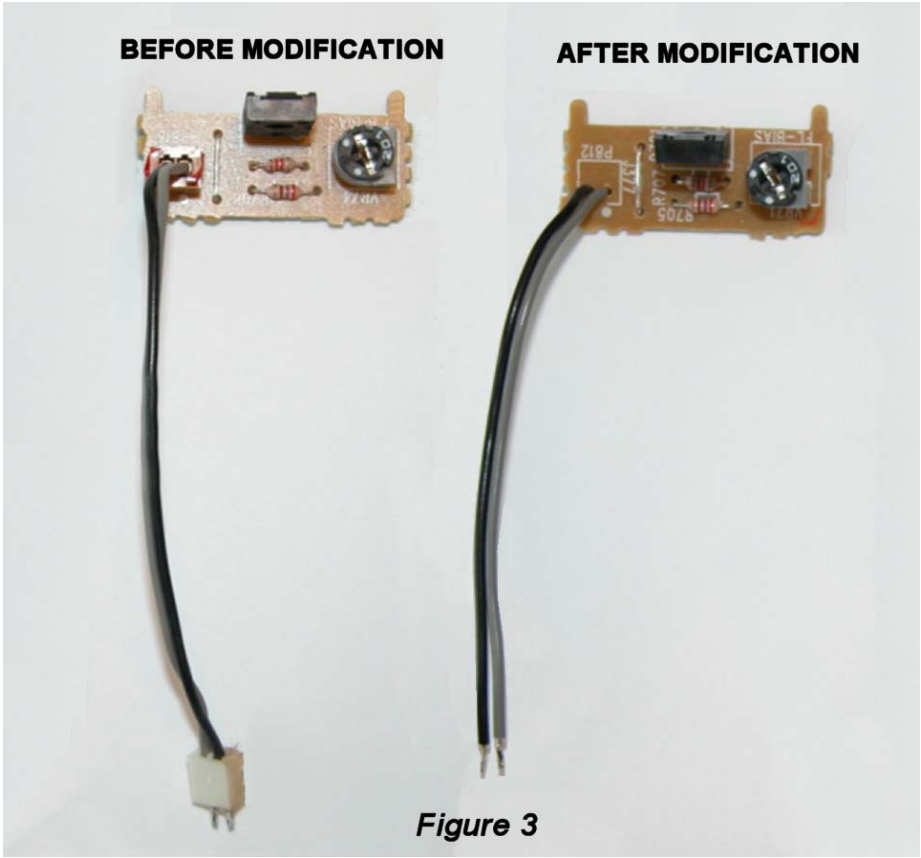


Figure 3

7) Replace the DSP and Processor boards
8) Recheck all bias voltages, following the instructions below:

MAIN AMP IDLE CURRENT ADJUSTMENT PROCEDURE
(Set variable resistors for MAIN/SURROUND Board)

Specialized equipment/parts needed:
Variable AC transformer ("Variac" type) to adjust and monitor AC line voltage.
Two pin harness plug to connect DMM to idle current test points, hk part# 55212910NR or equivalent

Conditions:
No Signal; No Load
AC Line Voltage adjust to: 120V/60Hz (120v model) or 230V/50Hz (230v model)

After turning the unit ON for 25 minutes or more to keep the Power/Driver TR at normal temperature, adjust the DC voltage at the two pin connector to the specified value by rotating the variable resistors.
VR71-74 are located on the Bias PCB's.
P801-804 are located on the main PCB just below the Bias PCB's. To guide/seat the two pin harness plug into the sockets, you may have to attach the harness wire to a long blade screwdriver as P801-803 are in a deep recess.

CHANNEL	ADJUSTMENT	MEASUREMENT POINT	VOLTAGE
FRONT L CHAN	VR71	P801	23mV ±2mV
FRONT R CHAN	VR74	P804	23mV ±2mV
SURROUND L CHAN	VR73	P803	23mV ±2mV
SURROUND R CHAN	VR72	P802	23mV ±2mV

SURROUND BACK AMP IDLE CURRENT ADJUSTMENT PROCEDURE
Same conditions as above.

After turning the unit ON for 25 minutes or more to keep the Power/Driver TR at normal temperature, adjust the voltage value at the two pin connector to the specified value by rotating the variable resistors.
VR31,32,51 and P301,308,309 are located at the top edge of the Surround PCB

CHANNEL	ADJUSTMENT	MEASUREMENT POINT	VOLTAGE
CENTER	VR32	P308	23mV ±2mV
SURROND BACK L	VR31	P301	23mV ±2mV
SURROND BACK R	VR51	P309	23mV ±2mV

9) After 5 minutes, check all voltages again at measurement points and re-adjust if necessary.

10) After more 5 minutes, check all voltages again at measurement points and re-adjust if necessary.

11) Replace the top cover and test the unit.

MODEL	SERIAL NUMBER (120V)	SERIAL NUMBER (230V)	STATUS	ACTION
AVR430	TF0001-01000 to TF0001-08116	TF0006-01000 to TF0006-06663	Unit may shut down or fan may run continuously	Hard wire bias cables to PCB's
AVR430	TF0007-08117 and above	TF0007-06664 and above	Modified by Factory	None Required
AVR630	TF0002-01000 to TF0002-11138	TF0007-01000 to TF0007-05650	Unit may shut down or fan may run continuously	Hard wire bias cables to PCB's
AVR630	TF0002-11139 and above	TF0007-05651 and above	Modified by Factory	None Required

harman/kardon TECH TIPS

Troubleshooting tips and solutions to common service problems

TIP# HKTT2004-03

Isolating audio problems in an AVR receiver
Using 6/8 Direct In

Models covered:	
AVR210	AVR310
AVR220	AVR320
AVR520	AVR225
AVR125	AVR525
AVR130	AVR230
AVR330	AVR430
AVR630	

The following charts are used to help the tech quickly isolate audio problems in an AVR receiver. Use the following procedures to help find what is working, then to quickly locate the problem area.

Equipment needed:

- ✓ 1 set of (RCA) Y adaptors.
- ✓ Function/signal generator.
- ✓ Oscilloscope.

Procedure:

1) Do a factory reset of the receiver. (This will eliminate any common micro processor problems.) Reset List can be found in this service manual.

2) Print the block diagram from the service manual.

3) With no inputs or speakers attached to the AVR turn on the receiver and turn the volume all the way down.

4) Turn unit off.

5) Hook up an oscillator to the 6/8 Direct in jacks using the Y adaptors. Adjust the oscillator to about 0db (.775Volts RMS).

6) Hook up an oscilloscope to monitor the line out jacks. Or, if there are no line out (preamp out) jacks monitor the input to the power amps or the speaker outs. (AVR125, 225, 130 do not have preamp out jacks)

7) Turn the AVR on. Select 6 or 8 direct in, depending on the receiver.

8) Slowly turn the volume control up until you can easily measure the voltage at the line out jacks. (-40 to -25db)

Isolating audio problems in an AVR receiver
Using 6/8 Direct In

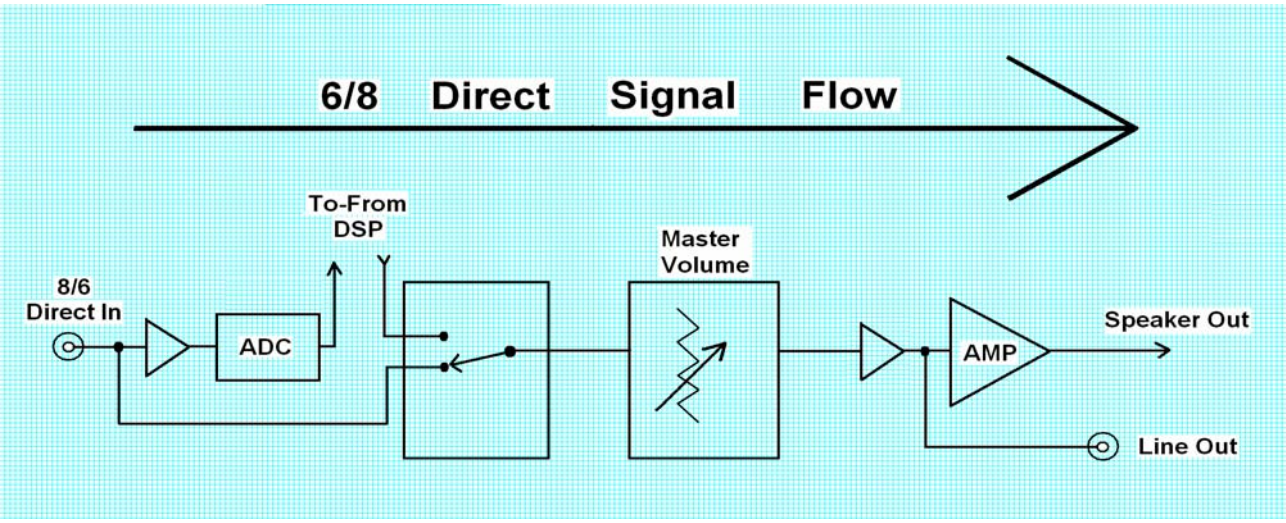
9) At this point you will be able to check and assure all output levels are the same.

10) IF THE OUTPUT LEVELS ARE NOT THE SAME STOP! Go no further. At this point you will need to use the charts to see where you are losing your signal. The chart shows the analog signal flow from the input jacks to the output jacks.

11) If the output levels are the same check the power out stage at the speaker out jacks.

12) If you find the levels at the speaker out jacks are OK, your problem will be in the DSP part of the receiver.

Congratulations! You have now eliminated 90% of the electronics in the AVR and confirmed that the problem is in the DSP section.



Isolating audio problems in an AVR receiver
Using 6/8 Direct In

AVR,210,310,510

6 CH IN	IC 501 In	IC 501 Out	CN 408	IC 704 In	IC704 Out	IC705 In	IC705 Out	IC706 In	IC 706 Out	IC 705 In	IC 705 Out	IC 716 In	IC716 Out	IC 717 In	IC 717 Out	IC 718 In	IC 718 Out	CP 405
FR	3	1	15	2	4	8	9	4	3	19	17	3	1					3
FL	5	7	13	27	25	21	20	25	26	10	12	5	7					1
SR			11	5	7			7	6					5	7			9
SL			9	24	22			22	23					3	1			7
C			5	21	19			19	20							3	1	5
SW			7	8	10			10	9							5	7	11

AVR220

6 CH IN	IC 501 In	IC 501 Out	CN 408	IC 704 In	IC704 Out	IC705 In	IC705 Out	IC706 In	IC 706 Out	IC714 In	IC714 Out	IC 705 In	IC 705 Out	IC 716 In	IC716 Out	IC 717 In	IC 717 Out	IC 718 In	IC 718 Out	CP 405
FR	5	7	15	2	4	8	9	4	3	5	7	10	12	5	7					1
FL	3	1	13	27	25	21	20	25	26	3	1	19	17	3	1					3
SR			11	5	7			7	6							5	7			9
SL			9	24	22			22	23							3	1			7
C			5	21	19			19	20									3	1	5
SW			7	8	10			10	9									5	7	11

AVR320/520

8 CH IN	IC 501 In	IC 501 Out	CN 408	IC 704 In	IC704 Out	IC705 In	IC705 Out	IC706 In	IC 706 Out	IC714 In	IC714 Out	IC 705 In	IC 705 Out	IC 716 In	IC716 Out	IC 717 In	IC 717 Out	IC 718 In	IC 718 Out	CP 405
FR	5	7	15	2	4	8	9	4	3	5	7	10	12	5	7					1
FL	3	1	13	27	25	21	20	25	26	3	1	19	17	3	1					3
SR			11	5	7			7	6							5	7			9
SL			9	24	22			22	23							3	1			7
C			5	21	19			19	20									3	1	5
SW			7	8	10			10	9									5	7	11

	CN418	CP102	IC101 In	IC101Out	IC102 In	ic102 oUT	ic103 iN	ic103 Out
SBR	3	3	3	4	21	23	5	7
SBL	1	1	25	26	4	2	3	1

AVR225/125

6 CH IN	IC 30 In	IC 30 Out	IC 31 In	IC 31 Out	IC 32 In	IC 32 Out	IC 33 In	IC 33 Out	IC 34 In	IC 34 Out	BN12	IC 81 In	IC 81 Out	IC 80 In	IC 80 Out	BN16 In	BN16 Out
L ch	27	25	19	20	5	7					1	3	1	9	10	1	2
R ch	24	22	22	23	3	1					3	5	7	15	14	4	5
SL	5	4	7	6					5	7	9						
SR	2	4	10	9					3	1	11						
C	8	18	4	3			3	1			7						
SW	21	19	25	26			5	7			5						

Isolating audio problems in an AVR receiver
Using 6/8 Direct In

AVR 525

In Jack	N404	P6	IC5 In	IC5 Out	IC3 In	IC3 Out	IC19 In	IC19 Out	IC18 In	IC20 In	IC20 Out	IC3 In	IC3 Out	IC18 Out	IC23 In	IC23 Out	IC25 In	IC25 Out	IC24 In	IC24 Out	IC26 In	IC26 Out	P9	N806
FL	1	1			10	9			4	2	3	1	3	5	3	1							1	1
FR	3	3			21	22			21	23	5	7	28	6	6	7							3	3
SL	5	5	2	4			4	3									3	1					5	5
SR	7	7	29	27			25	26									5	7					7	7
CTR	9	9	5	7			7	6											3	1			9	9
SW	11	11	26	24			22	23											5	7			11	11
SBL	13	13	8	10			10	9													3	1	13	13
SBR	15	15	23	21			19	20													6	7	15	15

AVR130

6 ch in	IC 23 In	IC 23 Out	IC 26 In	IC 26 Out	IC 42 In	IC42 Out	IC 44 In	IC 44 Out	IC 43 In	IC 43 Out	IC40 In	IC40 Out	IC49 In	IC49 Out	BN 12	BN11
L	18	17			21	23								1		
R	19	12			4	2									14	
SL			24	22			21	23						9		
SR			5	7			4	2						7		
C			27	25					21	23				5		
SUB			2	4					4	2				3		
SBL			21	19							21	23	5	7	13	
SBR			8	10							4	2	3	1	11	

AVR230/330

6 ch in	IC 23 In	IC 23 Out	IC 26 In	IC 26 Out	IC 42 In	IC42 Out	IC 44 In	IC 44 Out	IC 43 In	IC 43 Out	IC40 In	IC40 Out	IC49 In	IC49 Out	BN 12	BN11
L	18	17			21	23								1		
R	19	12			4	2									14	
SL			24	22			21	23						9		
SR			5	7			4	2						7		
C			27	25					21	23				5		
SUB			2	4					4	2				3		
SBL			21	19							21	23	5	7	13	
SBR			8	10							4	2	3	1	11	

AVR630/430

8 CH In	N404	IC 3	IC 3 Out	IC 14 In	IC 14 Out	IC 12 In	IC 12 Out	IC 3 In	IC 3 Out	IC 27 In	IC 27 Out	IC 18 In	IC 18 Out	IC 20 In	IC 20 Out	IC 3 In	IC 3 Out
FL	1	10	12	10	9	3	1	6	9	3	1	4	2	3	1	3	1
FR	3	19	17	19	20	5	7	23	20	5	7	21	23	5	7	26	7

	N404	IC 5 In	IC 5 Out	IC19 In	IC 19 Out	IC 25 In	IC 25 Out	IC 24 In	IC 24 Out	IC 26 In	IC 26 Out
SL	5	2	4	4	3	3	1				
SR	7	27	25	25	26	5	7				
CTR	9	5	7	7	6			3	1		
SW	11	24	22	22	23			5	7		
SBL	13	8	10	10	9					3	1
SBR	15	21	19	19	20					5	7

harman/kardon TECH TIPS

Troubleshooting tips and solutions to common service problems

For models: **TIP# HKTT2003-01 Rev5**

AVR7000/7200/7300/8000
AVR100/200/300/500
AVR110/210/310/510
AVR120/220/320/520
AVR125/225/325/525
AVR130/230/330/430/630
AVR135/235/335/435/635
AVR10
DPR1001
DPR1005
DPR2005
HK3370/3470/3375/3475
HK3250

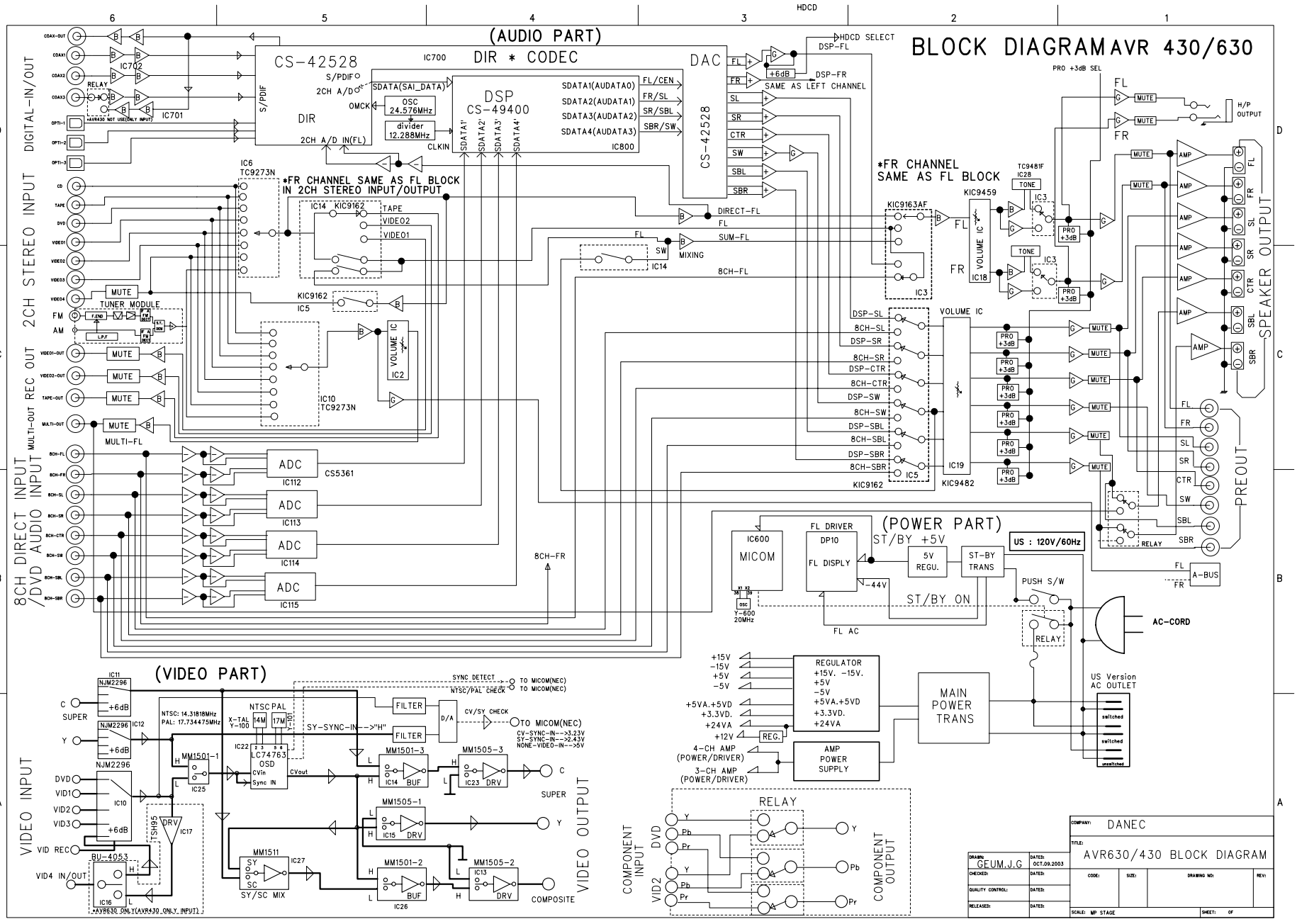
Subject: Backup Memory on AVR/DPR/HK series receivers

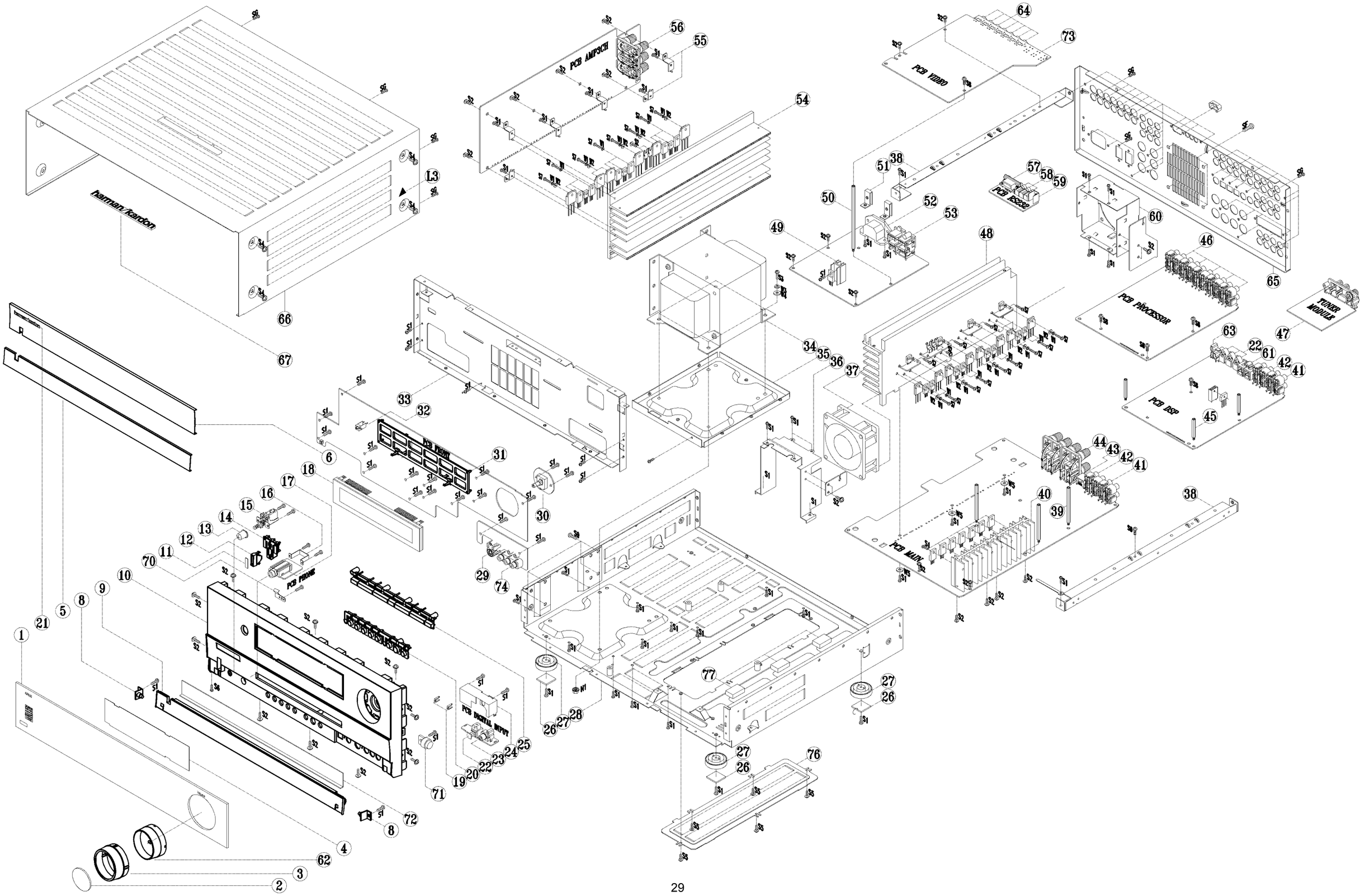
In the event of the complaint: "the receiver is losing its memory (any programmed system settings) when the unit is turned off, or after the unit is unplugged (briefly*)":

Check and replace:

Model	Designator	Location	Description	Part number
AVR10	C712 D709	Front PCB	0.047 Farad 5.5v capacitor and 1N4148 diode	#3439247315 #2058322101
AVR7000	C730	Front PCB	0.047 Farad 5.5v capacitor	# P10790-ND or # J3432147324X
AVR7200	C106	Front PCB	0.047 Farad 5.5v capacitor	# P10790-ND
AVR7300	C657	DSP PCB	0.047 Farad 5.5v capacitor	# H01-CEZXA0479MN-5
AVR8000	C726	Front PCB	0.047 Farad 5.5v capacitor	# 55230310NR or # P10790-ND
AVR100/200	C412	Front PCB	0.047 Farad 5.5v capacitor	# CEGT-B473J-0J0
AVR300	C906	Front PCB	0.1Farad 5.5v capacitor	# J4433210421X or # P10791-ND
AVR500	C906	Front PCB	0.1Farad 5.5v capacitor	# J4433210421X or # P10791-ND
AVR110/210/310/510 AVR120/220/320/520	C216	Front PCB	0.047 Farad 5.5v capacitor	# P10790-ND
AVR125/225	C734,C885	Front PCB	two 0.1F capacitors in parallel	# BCESOHD104
AVR325/525	C106	Front PCB	0.047 Farad 5.5v capacitor	# P10790-ND
AVR130/230/330	BAT1	Front PCB	3.6v Battery	# HABGP40BVH3A3H
AVR135/235/335	BAT1	Front PCB	3.6v Battery	# HGP15BNH3A3H
AVR430/630	C657	DSP PCB	0.047 Farad 5.5v capacitor	# CEZXA0479MN-5
AVR435/635	C557	DSP PCB	0.047 Farad 5.5v capacitor	# H03-CEZXA0479MN-0
DPR1001	BC601	Main PCB	0.1Farad 5.5v capacitor	# CEGT-B104J-0J0
DPR1005/2005	C437	Processor PCB	0.047 Farad 5.5v capacitor	# CEZXA0479MN-5
HK3370/3470	C301	Front PCB	0.1Farad 5.5v capacitor	# CEGT-B104J-0J0
HK3375/3475	C301	Front PCB	0.1Farad 5.5v capacitor	# CEGT-B104J-0J0
HK3250	C712 D709	Front PCB	0.047 Farad 5.5v capacitor and 1N4148 diode	#3439247315 #2058322101

* After approximately two weeks of being disconnected from AC supply, even a normally functioning receiver may lose any programmed settings and switch to default settings. (Four weeks for the DPR1005 & 2005)


BLOCK DIAGRAM AVR 430/630
(AUDIO PART)
(VIDEO PART)
(POWER PART)
DIGITAL-IN/OUT
2CH STEREO INPUT
MULTI-OUT REC OUT
8CH DIRECT INPUT /DVD AUDIO INPUT
VIDEO INPUT
VIDEO OUTPUT
SPEAKER OUTPUT
PREOUT
CS-42528
DIR * CODEC
DSP CS-49400
TUNER MODULE
MULTI-FL
*FR CHANNEL SAME AS FL BLOCK IN 2CH STEREO INPUT/OUTPUT
*FR CHANNEL SAME AS FL BLOCK
VOLUME IC
MICOM
FL DRIVER
DP10
FL DISPLY
ST/BY +5V
ST/BY ON
US : 120V/60Hz
AC-CORD
REGULATOR
MAIN POWER TRANS
AMP POWER SUPPLY
US Version AC OUTLET
RELAY
COMPONENT INPUT
COMPONENT OUTPUT
DANEC
AVR630/430 BLOCK DIAGRAM
GEUM.J.G
OCT.09.2003


PCB AMP3CH
PCB VIDEO
PCB ISCAN
PCB PROCESSOR
TUNER MODULE
PCB DSP
PCB MAIN
PCB FRONT
PCB DIGITAL INPUT
harman/kardon

Rev.NO.2

AVR430/630 EXPLODED VIEW PARTS LIST			
Ref#	**Description**	**Part Number**	**Qty**
1	WINDOW DISPLAY AVR630	H01-ZPC1119GABT-A	1
	WINDOW DISPLAY AVR430	H01-ZPC1022GABT-3	1
2	CAP KNOB VOLUME AVR630	H01-ZPC1020GACR-2	1
3	COVER KNOB VOLUME AVR430/630	H01-ZPC1021GASG-4	1
4	FILTER DISPLAY AVR430/630	H01-ZPC1018GART-7	1
5	AL DOOR AVR430/630	H01-ZMC11S00200-0	1
6	AL PANEL AVR430/630	H01-ZMC11S00300-2	1
7	Not Used		
8	BKT HINGE AVR430/630	H01-ZMC11S04A00-1	2
9	DOOR AVR430/630	ZPC1002GAGY-9	1
10	PANEL FRONT AVR430/630	ZPC1101GBGY-5	1
11	CAP BUTTON STAND-BY AVR430/630	H01-ZMC11S12A00-8	1
12	INDICATOR STAND-BY	ZPC1007GAMW-9	1
13	BUTTON POWER	ZPC1003GAGY-5	1
14	BUTTON STANDBY	ZPC1006GAWH-0	1
15	SW PUSH POWER SDDLB15700	H01-SWA2B221PDAA-7	1
16	BKT HEADPHONE	H01-ZMB01S00100-5	1
17	JACK PHONE 6.35 H70980110S 9P BK	H01-SOSS9CKX3NN-9	1
18	FL HCA-18LL03	H01-VDHCA18LL03-7	3
19	INDICATOR VIDEO	ZPC1102GAMW-1	2
20	BUTTON 8 KEY	ZPC1005GAGY-8	1
21	BADGE AL HARMAN/KARDON SILVER	H01-ZMC12S20A00-2	1
22	IC-REMOTE TORX179 FIBER OPTIC RECEIVER SHUTTER TYPE	n/a	4
23	JACK RCA 1P JE010003MN GND OR	H01-SORA1JE01NN-0	1
24	AC PUN SHIELD DIGITAL ET	H01-ZMC12S17A00-0	1
25	BUTTON 7 KEY	H01-ZPC1004GASG-0	1
26	RUBBER FOOT 19.7X19.7X2T BK	ZFNR19720SB-5	4
27	FOOT 50MM 15.8MM	ZPC1103GAGY-A	4
28	CHASSIS MAIN AVR430/630	n/a	1
29	CON DIN SCKT SOCKET CONNECTOR SVHS EST-S408J	H01-SORA8OSC5N8-2	1
30	SWIROT EC16B24204 5V 500U0A 10T 3P 0 0	H01-SWE3A0505S1-9	1
31	HOLDER VFD AVR430/630	ZPC1017GABK-6	1
32	IC-REMOTE RPM6938-RSIP-A3 RECEIVER 38KHZ-	H01-ICRPM6938NN-3	1
33	CHASSIS FRONT AVR430/630-	n/a	1
34	MN X'FORMER AVR630 120V-	H01-TXPWMM630B0-4	1
35	BKT TRANS BOTTOM-	H01-ZMC12S08B00-5	1
36	BKT FAN FRONT AVR430/630-	H01-ZMC11S09A00-6	1
37	FAN JF0925S1L	H01-ZVC11FAN100-6	1
38	BKT FRAME GUIDE	H01-ZMC11S04B00-3	2
39	STANDOFF HEX M4X0.7 6X61.9H	ZMC12S14AYE-9	3
40	H/SINK REG 118*20*	n/a	1
41	CON PHONO SCKT RCA 4P JW-4104RSA	H01-SORA40RSANN-6	1
42	CON PHONO SCKT RCA 4P JW-4104RSC	H01-SORA40GNDNN-7	1
43	JACK-TELE SNAP-IN GOLDEN TELECOM GDL1-8P8C 8T BK 0 0	n/a	1
44	CONN-SPE TERMINAL SPKR 8P SH081136JP FE 19MM 8 -- 0 0-	H01-SOPA81900NN-8	1
45	STANDOFF HEX M4X0.7 6X31.9H	ZMC12S13AYE-1	3
46	CON PHONO SCKT RCA 4P JW4104RS GND	H01-SORA40RSANN-6	5
47	TUNER MODULE KST-MB011MW0-80 US	H01-ZVC11TUNE01-7	1
48	H/SINK MAIN AVR630	n/a	1
49	AC HEATSINK 17*15*30 AVR430/630 – ME-	n/a	1
50	STANDOFF HEX M4X0.7 6X111.2H	ZMC12S15AYE-6	1
51	BKT INLET	H01-ZMC12S19A00-2	2
52	CON MAINS INLET A/C INLET 7014-NGP	H01-SOXA27014NN-9	1
53	CONN-SPE AC OUTLET 2P 110V FE 12.75MM 2 BK 0 0	H01-SOPA21275BK-3	1
54	H/SINK AMP AVR630	n/a	1
	H/SINK AMP AVR430	n/a	1
55	BKT HEATSINK	n/a	6
56	CONN-SPE TERMINAL SPKR 6P SH0611708P FE 19MM 6 BK 0 0	H01-SOPA619BKNN-7	1
57	JACK D-SUB 9P 87204-6063 W/DUST COVER BK	SOPA96063NN-0	1

58	JACK PHONE 3.6 EP-1401A 1P BK	H01-SOJW2350SNN-A	3
59	AC PUN BRACKET BKT GROUND ET 0.5T AVR520	H01-ZMC12S16A00-A	1
60	BKT FAN REAR AVR430/630	H01-ZMC11S10A00-6	1
61	CON PHONO SCKT RCA 2P W/GNDCAP JW-1502SN OO	H01-SORA21502NN-2	1
62	KNOB VOLUME AVR630	ZPC1016GAMW-8	1
63	CON PHONO SCKT RCA 1P W/GND JE010003LN OG	H01-SORA103LNNN-5	1
64	JACK RCA+S VIDEO CC5016031DN GNDCAP Y	H01-SORA11Y00NN-5	7
65	PANEL REAR AVR630	H01-ZMC11S11A00-7	1
	PANEL REAR AVR430	H01-ZMC10S01A00-0	1
66	COVER TOP AVR430/630	H01-ZMC11S08A00-5	1
67	BADGE MOLD HARMAN/KARDON H/STAMPING SILVER	H01-ZPC1104GAGY-1	1
68	Not Used		
69	COVER BOTTOM-	n/a	1
70	AC METAL STANDOFF HEX MF M4X8 6MMOD 31.9H	ZMC12S13AYE-1	4
71	DAMPER GEAR	H01-ZVC11GEAR01-A	1
72	BRACKET DOOR-	H01-ZMC11S14A00-A	1
73	JACK RCA 9P FRDCAP RDX3,BUX3,GNX3	H01-SORA90GNDNN-8	1
74	CON PHONO SCKT RCA-313P 3 PIN	H01-SORA3313PNN-3	1
S1	SCREW ST BH 3X10	ZS-TBM-3010-BB	64
S2	SCREW ST WPH 3X8	ZS-TWM-3008-BY	40
S3	SCREW BM 4X10	ZS-MCM-4010-BB	4
S4	SCREW ST WPH 4X8	ZS-TWM-4008-BB	12
S5	SCREW ST WPH 3X6	ZS-TWM-3006-BB	5
S6	SCREW ST BH 3X8	ZS-TBM-3008-BY	1
S7	SCREW ST BH 3X12 PIVOT	ZS-TBM-3012-BY	35
S8	SCREW BM 4X8	ZS-MCM-4008-BY	5
SG	SCREW ST BH 3X10 GROUND	ZS-TGM-3010-BB	46
SF	SCREW ST BH 5X10	ZS-TBM-5010-BB	4
N1	NUT M4 HEXAGON CIRCULAR EXTERNAL	ZN-SSM-4045-HZ	4
W1	WASHER SPRING 3	ZW-M62-3108-SZ	35
W2	WASHER PLAIN 3	ZW-M80-3305-PZ	14
W3	AC SPRING WASHER RT2250(PAV5005)	ZW-M76-3109-SZ	8
W4	WASHER PLAIN 4	ZW-MC0-4810-PZ	4
W5	WASHER FIBER 3 0.8T	ZW-F79-3008-PO	4

AVR-630 PART LIST

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3072US-BC00-1-3	**AC MECH BOM AVR630 HARMAN OEM**	
	H01-FBB0102AA00-7	FCORE FERRIT MAGNET SRH9. 9X20. 0X5. 1+CASE W5	
	H01-SWA2B21PDA&-7	SW PUSH POWER SDDLB15700	
	H01-TXPWMM630B0-4	MN X'FORMER AVR630 120V	BK
	H01-TXPWMMD02B0-A	MN X'FORMER AVR630EU 230V	IB
	H01-WF19N2605FU-9	FFC-JUMPER 19X 1.25MM 260MM	
	H01-WF23N2705FU-A	FFC-JUMPER 23X 1.25MM 270MM	
	H01-WF4261805BN-1	WIRECONASY DL 2.0MM 4P 180MM UL 1007 RIBBON 26 1	
	H01-WF9262205BN-3	WIRECONASY DL 2.0MM 9P 220MM UL 1007 RIBBON 26 1	
	H01-WG03SE85300-0	WIRECONASY DL 3.96MM 2P 530MM UL1007 RIBBON 16 1	
	XY1N055M0DW-7	GLUE TAPE , W=10MM L=55M DOUBLE-SIDE ,WHITE,#3M9495LE. @M	
	XY1N209M0DW-4	GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL	
	XY1N218M3SW-4	GLUE FURROW W=12MML=18.3M SS WHITE @ROLL	
	XY1N250M0CL-5	GLUE,TRANSPARENT,CANDY STRIP,W=12MM,L=50M @M	
	XY1N250M0DW-4	GLUE,TAPE,#9070,W=12MM,L=50,DOUBLE-SIDE,WHITE. @METER	
	XY2N450M0DW-6	GLUE,TAPE,#9070,W=24MM,L=50,DOUBLE-SIDE,WHITE. @METER	
	XY501110CRD-2	GLUE, RED #AK-501 F/SCREW V=110CC @BOTTL	
	XYALC01G000-2	ALCOHOL V=1.0GALLON @GALLON	
	XYEM501K000-2	SPECIALTY LUBRICANTS GREASE,#EM-50L,W=1KG @G	
	XYGLAA5K200-3	GLASS CLEANER,N.W=0.52KG @BOTTL	
	XYKIFA4L500-1	KIF VEG LIQUID CAR WAX,V=0.445 L @BOTTLE	
	XYVAS00K500-6	VASOGEN,YELLOW,N.W=0.5KG @BOTTL	
	ZFNR12062SB-8	RUBBER SIDE	
	ZFNR12072SB-5	RUBBER SIDE	
	ZFNR13830SB-6	RUBBER SIDE	
	ZFNR19720SB-5	RUBBER FOOT 19.7X19.7X2T BK	
	ZKC1130HA00-0	LABEL SERIAL AVR630	BK
	ZKD0230HA00-4	LABEL SERIAL AVR630EU	IB
	ZKC1173HA00-1	LABEL BARCODE AVR630	BK
	ZKD0273HA00-5	LABEL BARCODE AVR630EU	IB
	ZKC1195HA00-5	LABEL LICENSE AVR630	
	ZKC1222HA00-2	LABEL RISK	
	ZKC1229HA00-7	LABEL DATE	
	ZKC1281HA00-9	LABEL QC CHECK	
	ZKGEN29HA00-8	LABEL DATE BLANK	
	ZKGEN30HA00-6	LABEL SERIAL BLANK	
	ZKGEN73HA00-7	LABEL BARCODE BLANK	
	ZKGEN97HA00-3	LABEL MAIN POWER REMIND	
	H01-ZMB01S00100-5	BKT HEADPHONE JACK	
	H01-ZMB01S02200-9	SPRING PLATE GND C5212 0.2T	
	H01-ZMC11HS0100-5	H/SINK AMP AVR630	
	H01-ZMC11HS0200-7	H/SINK MAIN AVR630	
	H01-ZMC11S00200-0	AL DOOR AVR430/630	
	H01-ZMC11S00300-2	AL PANEL AVR430/630	
	H01-ZMC11S04A00-1	BKT HINGE AVR430/630 LEFT	
	H01-ZMC11S04B00-3	BKT FRAME GUIDE	
	H01-ZMC11S05B00-4	BKT HINGE AVR430/630 RIGHT	
	H01-ZMC11S06A00-3	SPRING STOPPER AVR430/630	
	H01-ZMC11S07A00-4	CHASSIS FRONT AVR430/630	
	H01-ZMC11S08A00-5	COVER TOP AVR430/630	
	H01-ZMC11S09A00-6	BKT FAN FRONT AVR430/630	
	H01-ZMC11S10A00-6	BKT FAN REAR AVR430/630	
	H01-ZMC11S11A00-7	PANEL REAR AVR630	BK

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	H01-ZMD02S11A00-4	PANEL REAR AVR630EU	IB
	H01-ZMC11S12A00-8	CAP BUTTON STAND-BY AVR430/630	
	H01-ZMC11S13A00-9	CHASSIS MAIN AVR430/630	
	H01-ZMC11S14A00-A	BRACKET DOOR	
	H01-ZMC12S07A00-2	COVER BOTTOM	
	H01-ZMC12S08B00-5	BKT TRANS BOTTOM	
	H01-ZMC12S09A00-4	BKT HEATSINK	
	ZMC12S13AYE-1	STANDOFF HEX M4X0.7 6X31.9H	
	ZMC12S14AYE-9	STANDOFF HEX M4X0.7 6X61.9H	
	ZMC12S15AYE-6	STANDOFF HEX M4X0.7 6X111.2H	
	H01-ZMC12S19A00-2	BKT AC INLET	
	H01-ZMC12S20A00-2	BADGE AL HARMAN/KARDON SILVER	
	ZNSSM4045HZ-4	NUT M4 HEXAGON CIRCULAR EXTERNAL	
	ZPC1002GAGY-9	DOOR AVR430/630	
	ZPC1003GAGY-5	BUTTON POWER	
	H01-ZPC1004GASG-0	BUTTON 7 KEY	BK
	H01-ZPD0104GASG-8	BUTTON 7 KEY EU	IB
	ZPC1005GAGY-8	BUTTON 8 KEY	
	ZPC1006GAWH-0	BUTTON STANDBY	
	ZPC1007GAMW-9	INDICATOR STAND-BY	
	ZPC1016GAMW-8	KNOB VOLUME AVR630	
	ZPC1017GABK-6	HOLDER VFD AVR430/630	
	H01-ZPC1018GART-7	FILTER VFD	
	H01-ZPC1020GACR-2	CAP KNOB VOLUME AVR630	
	H01-ZPC1021GASG-4	COVER KNOB VOLUME AVR430/630	
	ZPC1101GBGY-5	PANEL FRONT AVR630	BK
	ZPD0201GBGY-9	PANEL FRONT AVR630EU	IB
	ZPC1102GAMW-1	INDICATOR VIDEO 4	
	ZPC1103GAGY-A	FOOT 50MM 15.8MM	
	H01-ZPC1104GAGY-1	BADGE MOLD HARMAN/KARDON H/STAMPING SILVER	
	H01-ZPC1119GABT-A	WINDOW DISPLAY AVR630	
	ZSMCM4008BY-1	SCREW BM 4X8	
	ZSMCM4010BB-5	SCREW BM 4X10	
	ZSTBM3008BY-1	SCREW ST BH 3X8	
	ZSTBM3010BB-5	SCREW ST BH 3X10	
	ZSTBM3012BY-A	SCREW ST BH 3X12 PIVOT	
	ZSTGM3010BB-3	SCREW ST BH 3X10 GROUND	
	ZSTWM3006BB-3	SCREW ST WPH 3X6	
	ZSTWM3008BY-8	SCREW ST WPH 3X8	
	ZSTWM3A08BY-6	SCREW ST W7.5PH 3X8	
	ZSTWM4008BC-3	SCREW ST WPH 4X8 SILVER CHROM	
	ZTB017030AA-4	CABLE TIE 100MM NYLON 6	
	ZUC1201AABK-7	SPONGE 30X30X10T BK	
	ZV4P00030TH-3	HEAT SHRINK TUBE L30MM*D4.0MM*T0.5MM	
	H01-ZVC11DWT100-3	TAPE DOOR	
	H01-ZVC11DWT200-5	TAPE PANEL	
	H01-ZVC11FAN100-6	FAN JF0925S1L	
	ZVC11FILM0A-A	PROTECTION FILM	
	ZVC11FLT100-9	FELT COVER PANEL	
	ZVC11FLT200-7	FELT COVER KNOB	
	H01-ZVC11GEAR01-A	DAMPER GEAR DP120	
	H01-ZVC11TUNE01-7	TUNER MODULE KST-MB011MW0-81 US	BK
	H01-ZVD01TUNE00-2	TUNER MODULE KST-MB114MW1-81 OEM EU	IB
	ZWF793008PO-5	WASHER FIBER 3 0.8T	
	ZWM623108SZ-2	WASHER SPRING 3	
	ZWM763109SZ-2	AC SPRING WASHER RT2250(PAV5005)	
	ZWM803305PZ-1	WASHER PLAIN 3	
	ZWMC04810PZ-5	WASHER PLAIN 4	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3072US-DGMI-1-2	**AC EMBD IMA DSP BD AVR630**	
	PBC11KDGB21-0	AVR630 DSP DUAL PCB 209MM*170MM	
C657	CEZXA0479MN-5	CM 47MI0F +80% -20% 5.5V 70C	
IC601	H01-ICKA78R08I2-4	IC-KA78R08API TO-220IS-4PIN	
T701	H01-LF11030A2NA-4	TFPULSE TRANSFORMER 110UH FP-110 FERRIT MAGNET	
T700	H01-LF110P110NA-8	TFPULSE TRANSFORMER 110UH FP-120 FERRIT MAGNET	
Y800	H01-OSCEM24M5RU-A	VCXO 24M576 HZ +50 PPM -50 PPM 0 OHM 3.3V	
Y600	H01-OSCNI20MOCU-6	CSTLS20MOX51-B0	
	RC3DI022AIN-2	RCF 2R2 OHM +5% 250MI0W	
	RC3DI033AIN-6	RCF 3R3 OHM +5% 250MI0W	
SK700	H01-RLL0516632B-A	RELAYPWR 5.0V 166.0OHM 1.0A 24.0V	
NJ4	H01-SORA103LNNN-5	CON PHONO SCKT RCA 1P W/GND JE010003LN OG	
NJ5	H01-SORA21502NN-2	CON PHONO SCKT RCA 2P W/GNDCAP JW-1502SN OO	
NJ72	H01-SORA40RSANN-6	JACK RCA 4P JB040131ZN GN BN PP TA	
NJ71	H01-SORA40RSCNN-A	JACK RCA 4P JB040131QN WH BU RD GY	
NJ74 75	H01-SOTOR179LBA-0	D-LEM TORX-179L	
NJ76	H01-SOTOT179LBA-7	D-LEM TOTX-179L	
REWORK	H01-WC1181505C1-8	WCL 150-05-05 UL1007 HOOK-UP 18 150MM BK 5 5	
REWORK	H01-WC1260405C1-1	WCL 040-05-05 UL1007 HOOK-UP 26 040MM BK 5 5	
REWORK	H01-WC1260705C1-6	WCL 070-05-05 UL1007 HOOK-UP 26 070MM BK 5 5	
REWORK	H01-WC1261155C1-0	WCL 115-05-05 UL1007 HOOK-UP 26 115MM BK 5 5	
W3~W3-1 W4~W4-1	H01-WC1261305C1-2	WCL 130-05-05 UL1007 HOOK-UP 26 130MM BK 5 5	
N405	H01-WG06SB83000-8	CNT ASSY 2.0MM 6P 300MM RIBBON 26AWG UL1007	
P1	H01-WN05SB00000-0	CONN 2.0MM 5 MA ST NAT GT201-5P-TS	
N408	H01-WN06AB00001-4	CNT PLUG BD'BD SOCKET 2.0mm 35237-0610	
P403	H01-WN09SB00000-A	CONN 2.0MM 9 MA ST NAT GT201-9P-TS	
N407	H01-WN11SB00000-8	CONN 2.0MM 11P MA ST NAT MOLEX 35336-1110 0 0	
N404	H01-WN17SB00000-1	CONN 2.0MM 17 MA ST NAT MOLEX 35336-1710 0 0	
N403	H01-WN19AB00000-9	CONN 2.0MM 19 MA R NAT SOCKET MOLEX 35237-1910 0 0	
N401	H01-WN19SB00000-6	CONN 2.0MM 19 MA ST NAT MOLEX 35336-1910 0 0	
N406	H01-WN23AI000WH-9	CONN 1.25MM 23 FE ANG WH GF120-23S-LS 2794 A6	
	XY0N618M3SW-A	GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL	
	XY0P801K000-A	WIRE TIN D=0.8MM N.W=1.0KG @KG	
	XY1N209M0DW-4	GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL	
	XY1N218M3SW-4	GLUE FURROW W=12MML=18.3M SS WHITE @ROLL	
	XY1P202K000-1	WIRE, TIN, D=1.2MM N.W=2.0KG @KG	
	XY30155G00-0	TCE,CLEANER,-301#,V=55GALL0N,TYPELESS @GALLON	
	XY4N836M5CL-9	GLUE TRANSPARENT W=48MM L=36.5M @ROLL	
	XY6R301K000-0	BAR,TIN,63/37,N.W=1.0KG @KG	
	XYALC01G000-2	ALCOHOL V=1.0GALLON @GALLON	
	XYGLU00K5RD-7	GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG	
	XYJUI00K5GY-5	JUICE TIN N=0.5KG GREY @KG	
	XYRF801G000-7	FLUX #RF-800 V=1.0 GALLON @ GALLON	
	XYWAX10K000-6	ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG	
	3SA-3072US-DGAA-1-0	**AC ESABD IAA TOP DSP BD AVR630**	
L600	H01-LAINB047ACR-3	LF 4U7H +10% 1.7 OHM 190.0A	
R619	RC3DI010AIN-1	RCF 1R0 OHM +5% 250MI0W	
	3SA-3072US-DGAR-1-2	**AC ESABD TOP IAR DSP BD AVR630**	
C472 473 474	CEHDC0108NN-3	CE 1MI0F +20% 6.3V 8X11.5 85C	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
C126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 231 232 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 456 457 458 459 460 461 462 463 464 465 613 620 621 727 729 731 733 735	CEHFC0106MN-5	CE 10U0F 16.0V 5X11 P2.5MM	
C150 151 152 153 233 470 471 618 630 723 800 807 811 820 822 828 830	CEHFC0107MN-3	CAP ELEC 100U0F 16.0V M 5X11 P2.5MM	
C211 212 213 214 627	CEHFC0476MN-5	CE 47U0F +20% 16.0V 5X11 P2.5MM	
C619	CEHIC0104MN-A	CE 100N0F +20% 50.0V 85C SSE TYPE	
C203 204 205 206 207 208 209 210 223 224 225 226 227 228 229 230	CEHIC0105NN-7	CE 1U0F +20% 50.0V 5X11 85C	
C806	CEHIC0225NN-8	CE 2U2F +20% 50.0V 85C 2.5MM	
C725	CEHIC0475NN-7	CE 4U7F +20% 50.0V 85C	
Q611	H01-TRMPSA06NNA-4	TR-SLPLF MPSA06 N 500MI0A TO-92	
	3SA-3072US-DGSB-1-3	**AC ESABD SMD BOT DSP BD AVR630**	
C606 608 611 615	CZJII0101BE-2	CCCFMIC 100P0F +5% -5% 50.0V NP0	
C432 433 444 445	CZJII0471BE-2	CCCFMIC 470P0F +5% -5% 50.0V NP0	
C434 435 436 437 438 439 440 441 442 443 446 447	CZJII0561CE-0	CCCFMIN 560P0F +5% -5% 50.0V NP0 0805	
C721	CZKII0102BC-7	CCCFMIC 1N0F +10% -10% 50.0V X7R	
C709 711 716 997 998	CZKII0103BC-5	CCCFMIC 10N0F +10% -10% 50.0V X7R	
C416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431	CZKII0272BC-4	CCCFMIC 2N7F +10% -10% 50.0V X7R	
C116 117 118 119 120 121 122 123 124 125 154 155 156 157 158 159 160 161 162 163 164 165 167 168 169 170 171 172 173 174 191 192 193 194 195 196 197 198 199 200 201 202 215 216 217 218 219 220 221 222 468 469 612 614 617 622 624 628 705 707 708 710 715 719 722 724 726 728 730 732 734 742 801 802 808 809 810 814 815 816 818 819 821 829	CZZFI0104BF-8	CCCFMIC 100N0F +80% -20% 16.0V Y5V	
C720	CZZII0223BF-1	CCCFMIC 22N0F +80% -20% 50.0V Y5V 0603	
D400 401 600 601 604 651 700	H01-DS1S50094NB-A	D-SLP 1SS355 35.0V 225MI0A	
L1 100 101 102 103 104 105 106 107 108 109 110 111 700 701 704 803 R728 880	H01-FB2K52012NN-5	FBEAD SURFACE MT 2500OHM FCM2012H-252T02	
L707 708	H01-FB3002012NN-4	FBEAD SURFACE MT 300OHM FCM2012V-301T07	
R6 7 8	RS3AD0000NA-0	RMGCFMIC 0 OHM +0% 62MI5W	
R708 731 733 734 745	RS3AD0100NA-7	RMGCFMIC 10R0 OHM +5% 62MI5W	
R632 711 730 732	RS3AD0101NA-5	RMGCFMIC 100R0 OHM +5% 62MI5W	
R631 712 713	RS3AD0102NA-3	RMGCFMIC 1K0 OHM +5% 62MI5W	
R180 181 182 183 184 185 186 187 5	RS3AD0103NA-1	RMGCFMIC 10K0 OHM +5% 62MI5W	
R116 117 118 119 120 121 122 123 140 141 142 143 144 145 146 147 448 449 450 451 452 453 454 455 470 471	RS3AD0104NA-A	RMGCFMIC 100K0 OHM +5% 62MI5W	
R416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431	RS3AD0122NA-8	RMGCFMIC 1K2 OHM +5% 62MI5W	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
R132 133 134 135 136 137 138 139 196 197 198 199 200 201 202 203	RS3AD0151NA-1	RMGCFMIC 150R0 OHM +5% 62MI5W	
R657	RS3AD0200NA-3	RES,CHIP 20 OHM 1/16W +/-5% 0603	
R716	RS3AD0220NA-8	RMGCFMIC 22R0 OHM +5% 62MI5W	
R729 804	RS3AD0221NA-6	RMGCFMIC 220R0 OHM +5% 62MI5W	
R744 876 877 878	RS3AD0332NA-8	RMGCFMIC 3K3 OHM +5% 62MI5W	
R400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415	RS3AD0432NA-4	RMGCFMIC 4K3 OHM +5% 62MI5W	
R157 166 167 168 169 170 171 526 651 652 653	RS3AD0472NA-3	RMGCFMIC 4K7 OHM +5% 62MI5W	
R148 149 150 151 152 153 154 155 623	RS3AD0473NA-1	RMGCFMIC 47K0 OHM +5% 62MI5W	
R456 457 458 459 460 461 462 463	RS3AD0561NA-4	RMGCFMIC 560R0 OHM +5% 62MI5W	
R432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447	RS3AD0562NA-2	RMGCFMIC 5K6 OHM +5% 62MI5W	
R710	RS3AD0621NA-1	RMGCFMIC 620R0 OHM +5% 62MI5W	
R709	RS3AD0681NA-5	RMGCFMIC 680R0 OHM +5% 62MI5W	
NJ13 14	RS3AY0103NA-7	RCA 10K0 OHM +5% 62M15W 4	
NJ15 16	RS3AY0332NA-3	RCA 3K3 OHM +5% 62M15W 4	
L800 JUM5 6 7 11 12 13 14 15 16 17 18 19 20	RS3BB0000NA-5	RMGCFMIN 0 OHM +5% 100MI0W 0805	
Q402 403	H01-TRDTA114YNI-9	TR-SSD DTA114YKA P 10K0 OHM 47K0 OHM	
Q600 601 604 605 606 607 608 609 612 613 700	H01-TRDTC114YNI-5	TR-SSD DTC114YKA N 10K0 OHM 47K0 OHM	
Q400 401	H01-TRKTD1304ND-5	TR-SLPSWA KTD1304 N 20V 300MI0A SOT-23	
	3SA-3072US-DGST-1-9	**AC ESABD TOP SMD DSP BD AVR630**	
C100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 142 143 144 145 146 147 148 149 175 176 177 178 179 180 181 182 235 236 237 238 616 625 626	CZJII0101BE-2	CCCFMIC 100P0F +5% -5% 50.0V NP0	
C700 702 743	CZJII0220BE-5	CCCFMIC 22P0F +5% -5% 50.0V NP0	
C853	CZJII0221BE-3	CCCFMIC 220P0F +5% -5% 50.0V NP0	
C491 492 493 494	CZJII0470BE-4	CCCFMIC 47P0F +5% -5% 50.0V NPO 0603	
C851	CZJII0471BE-2	CCCFMIC 470P0F +5% -5% 50.0V NP0	
C183 184 185 186 187 188 189 190 243 244	CZKII0102BC-7	CCCFMIC 1N0F +10% -10% 50.0V X7R	
C703 706 717	CZKII0103BC-5	CCCFMIC 10N0F +10% -10% 50.0V X7R	
C804	CZKII0122BC-1	CCCFMIC 1N2F +10% -10% 50.0V X7R	
C466 467	CZKII0561BC-8	CCCFMIC 560P0F +10% -10% 50.0V X7R	
C805	CZKII0680BE-7	CCCFMIC 68P0F +10% -10% 50.0V NP0	
C234 239 240 241 242 448 449 450 451 452 453 454 455 629 714 718 803 891 899	CZZFI0104BF-8	CCCFMIC 100N0F +80% -20% 16.0V Y5V	
D603 605 606	H01-DS1S50094NB-A	D-SLP 1SS355 35.0V 225MI0A	
L703 802 804 805 R879	H01-FB2K52012NN-5	FBEAD SURFACE MT 2500OHM FCM2012H-252T02	
L705 R735	H01-FB3002012NN-4	FBEAD SURFACE MT 300OHM FCM2012V-301T07	
IC804	H01-IC49L8192I5-A	IC-FLASH MEMORY ROM AT49LV8192A 70ns	
IC801	H01-IC74V244MG5-3	IC-LOGIC 74VHCT244A INVERTER CMOS	
IC802	H01-IC74VC244G5-6	IC-LOGIC 74VHC244A INVERTER CMOS	
IC602	H01-ICBU4094BD3-2	IC CMOS BU4094BF SOP16	
IC700	H01-ICCS42528EC-0	IC-CODEC CS42528CQ	
IC800	H01-ICCS49400ED-3	IC-DSP CS494003-CQ LQFP144	
IC112 113 114 115	H01-ICCS5361KG4-0	IC-CONV CS5361-KZ A/D TSSOP24	
IC600	H01-ICD703033EL-56	IC-MICOM FLASH NEC UPD70F3033BGF 0228KK001 JAPAN QFP100	
IC805	H01-ICK4S1616M6-9	IC-SDRAM K4S161622E-TC70 OR TC80	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
IC100 101 102 103 104 105 106 107 108 109 110 111 116 117 400 401 402 403 404	H01-ICLM02068D2-A	IC-OPERAMP NJM2068M DUAL SOP8	
IC603	H01-ICM24C04WD2-1	IC-EEPROM M24C04WMN6T	
IC701 702	H01-ICM74H04MD4-2	IC-LOGIC M74HCU04M1R INVERTER HCT	
IC803	H01-ICNJU6324D2-3	IC-SPECFUNC NJU6324M SOP8 CMOS CRYSTAL	
R600 601 602 603 604 605 719	RS3AD0100NA-7	RMGCFMIC 10R0 OHM +5% 62MI5W	
R715 720	RS3AD0101NA-5	RMGCFMIC 100R0 OHM +5% 62MI5W	
R100 101 102 103 104 106 107 124 125 126 127 128 129 130 131 466 467 472 473 606 607 608 609 610 617 618 626 627 628 629 630	RS3AD0102NA-3	RMGCFMIC 1K0 OHM +5% 62MI5W	
R172 173 174 175 176 177 178 179 188 189 190 191 192 193 194 195 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 238 239 240 241 242 243 611 612 616 621 624 655 656 658 659 802 868 869 871 872 873 874	RS3AD0103NA-1	RMGCFMIC 10K0 OHM +5% 62MI5W	
R654	RS3AD0103NA-1	RMGCFMIC 10K0 OHM +5% 62MI5W	BK
R614	RS3AD0103NA-1	RMGCFMIC 10K0 OHM +5% 62MI5W	IB
R622 702 706 724	RS3AD0104NA-A	RMGCFMIC 100K0 OHM +5% 62MI5W	
R464 465	RS3AD0122NA-8	RMGCFMIC 1K2 OHM +5% 62MI5W	
R204 205 206 207 208 209 210 211 244 245 246 247	RS3AD0151NA-1	RMGCFMIC 150R0 OHM +5% 62MI5W	
R156 158 159 160 161 162 163 234 235 527	RS3AD0203NA-8	RMGCFMIC 20K0 OHM +5% 62MI5W	
R746 801	RS3AD0221NA-6	RMGCFMIC 220R0 OHM +5% 62MI5W	
R725 736 738	RS3AD0222NA-4	RMGCFMIC 2K2 OHM +5% 62MI5W	
R108 109 110 111 112 114 115	RS3AD0223NA-2	RMGCFMIC 22K0 OHM +5% 62MI5W	
R901	RS3AD0270NA-4	RES,CHIP 27 OHM 1/16W +/-5% 0603	
R870	RS3AD0302NA-6	RMGCFMIC 3K0 OHM +5% 62MI5W	
R2 875	RS3AD0332NA-8	RMGCFMIC 3K3 OHM +5% 62MI5W	
R803	RS3AD0391NA-3	RMGCFMIC 390R0 OHM +5% 62MI5W	
R722	RS3AD0471NA-5	RMGCFMIC 470R0 OHM +5% 62MI5W	
R105 236 237 1 4 625	RS3AD0472NA-3	RMGCFMIC 4K7 OHM +5% 62MI5W	
R232 233 613 620 727 737 739	RS3AD0473NA-1	RMGCFMIC 47K0 OHM +5% 62MI5W	
R721	RS3AD0511NA-8	RMGCFMIC 510R0 OHM +5% 62MI5W	
R468 469 704 726 743	RS3AD0561NA-4	RMGCFMIC 560R0 OHM +5% 62MI5W	
R113	RS3AD0682NA-3	RMGCFMIC 6K8 OHM +5% 62MI5W	
R700 705 723	RS3AD0750NA-1	RMGCFMIC 75R0 OHM +5% 62MI5W	
NJ17 18 19	RS3AY0103NA-7	RCA 10K0 OHM +5% 62M15W 4	
NJ1 10 11 2 3 6 7 8 9	RS3AY0470NA-2	RCA 47R0 OHM +5% 62M15W 4	
JUM3 4 8 9 10	RS3BB0000NA-5	RMGCFMIN 0 OHM +5% 100MI0W 0805	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3072US-FCMI-1-7	**AC EMBD IMA FRONT BD AVR630**	
	PBC11KFCI21-1	AVR630 FRONT SINGLE PCB 400MM*163MM FR-1	
C131	CEHFC0476DH-4	CE 47U0F +20% 16.0V 85C	
CA11	CFMVA0104NN-2	CPPMX 100N0F +20% -20%	
D703 704 705 706 707 708 709 710	H01-DL30B2015AA-A	D-LEM 30B3-20-15 GaN SUPER BLUE WATER CLEAR 15	
D800	H01-DL3BA05V0BA-2	D-LEM BLUE/AMBER 3PIE RD RND CL	
D801 802	H01-DLRED3FRDBA-5	D-LEM RED/GREEN 3F RD RND CL	
RM100	H01-ICRPM6938NN-3	IC-REMOTE RPM6938-RSIP-A3 RECEIVER 38KHZ	
NJ80	H01-SORA3313PNN-3	CON PHONO SCKT RCA-313P 3 PINS	
NJ81	H01-SORA8OSC5N8-2	JACK S-VIDEO 1P C40160261N	
NS199	H01-SOXA27014NN-9	CON MAINS INLET A/C INLET 7014-NGP	
VR100	H01-SWE3A0505S1-9	SWIROT EC16B24204 5V 500U0A 10T 3P 0 0	
DP10	H01-VDHCA18LL03-7	FL HCA-18LL03	
W200 201	H01-WG01S083000-8	WIRECONASY UNIQUE 1P 300MM UL1007 PVC DISCRETE 22 2	
N101~P101	H01-WG03AB80900-2	WIRECONASY DL 2.0MM 03P 90MM ANG UL1007 RIBBON 26 1 B2011HR2	
N104	H01-WG04SB80900-7	WIRECONASY DL 2.0MM 04P 90MM UL1007 RIBBON 26 1	
N102	H01-WG04SB82200-6	WIRECONASY DL 2.0MM 04P 220MM UL1007 RIBBON 26 1	
N110	H01-WG07SD84000-4	WIRECONASY DL 2.5MM 07P 400MM UL1007 RIBBON 24 1	
P199	H01-WN02SE00000-6	CON 3.96MM PITCH HEADER 2 POS MOLEX 35328-0210	
P104	H01-WN04SB00000-3	CONN 2.0MM 4 MA ST NAT GT201-4P-TS	
P121	H01-WN11AB00000-0	CONN 2.0MM 11 MA R NAT SOCKET MOLEX 35237-1110 0 0	
P120	H01-WN11SB00000-8	CONN 2.0MM 11P MA ST NAT MOLEX 35336-1110 0 0	
P123	H01-WN19AB00000-9	CONN 2.0MM 19 MA R NAT SOCKET MOLEX 35237-1910 0 0	
P105	H01-WN19AI00000-2	CONN 1.25MM 19 FE ANG WH GF120-19S-LS 2794 A6	
P122	H01-WN19SB00000-6	CONN 2.0MM 19 MA ST NAT MOLEX 35336-1910 0 0	
P103	H01-WN23AI000WH-9	CONN 1.25MM 23 FE ANG WH GF120-23S-LS 2794 A6	
N107	H01-WS4264822EN-4	WIRECONASY DL 2.0MM 04P 480MM UL1533 SHIELD 26 1 2/2	
N103	H01-WS6265105EN-2	WIRECONASY DL 2.0MM 6P 510MM UL1533 SHIELD 26 1	
	XY0N211N5WH-4	CABLE TIE W=0.2MM L=11.5CM WHITE @ STRIP	
	XY0N618M3SW-A	GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL	
	XY0P523K000-A	WIRE,IRON,D=0.5MM,N.W=23KG @KG	
	XY0P801K000-A	WIRE TIN D=0.8MM N.W=1.0KG @KG	
	XY1N127N0WH-5	ADHESIVE WHITE D=1.1CM L=27CM @KG	
	XY1N209M0DW-4	GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL	
	XY1N218M3SW-4	GLUE FURROW W=12MML=18.3M SS WHITE @ROLL	
	XY1N250M0DW-4	GLUE,TAPE,#9070,W=12MM,L=50,DOUBLE-SIDE,WHITE. @METER	
	XY1P202K000-1	WIRE, TIN, D=1.2MM N.W=2.0KG @KG	
	XY30155G00-0	TCE,CLEANER,-301#,V=55GALL0N,TYPELESS @GALLON	
	XY4N836M5CL-9	GLUE TRANSPARENT W=48MM L=36.5M @ROLL	
	XY6R301K000-0	BAR,TIN,63/37,N.W=1.0KG @KG	
042	XYALC01G000-2	ALCOHOL V=1.0GALLON @GALLON	
	XYGLU00K5RD-7	GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG	
	XYRF801G000-7	FLUX #RF-800 V=1.0 GALLON @ GALLON	
	XYWAX10K000-6	ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG	
	3SA-3072US-FCAA-1-5	**AC ESABD IAA FRONT BD AXIAL AVR630**	
D101	H01-DG1N04148NB-4	D-SLP 1N4148 100.0V 150E-3A	
J139	H01-LAINB0470CR-2	LF 47U0H +10% 5.8 OHM 500MI0A	
L100	H01-LAINB047ACR-3	LF 4U7H +10% 1.7 OHM 190.0A	
R165 166 167	RC3DI0103IN-7	RCF 10K0 OHM +5% 250MI0W	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
R802	RC3DI0221IN-1	RCF 220R0 OHM +5% 250MI0W	
R803	RC3DI0271IN-8	RCF 270R0 OHM +5% 250MI0W	
R700 701 702 703	RC3DI0331IN-5	RCF 330R0 OHM +5% 250MI0W	
	3SA-3072US-FCAR-1-7	**AC ESABD IAR FRONT BD RADIAL AVR630**	
C123	CCZID0104NA-2	CC 100N0F +80% -20% 50.0V F	
C601	CEHEC0107NN-9	CE 100U0F +20% 10.0V 5X11 85C	
C103	CEHFC0476DH-4	CE 47U0F +20% 16.0V 85C	
C129 130	CPIKC0473NN-0	CPF 47N0F +10% 100.0V	
S200 201 202 203 204 205 206 207 208 209 211 212 213 214 215 216 217 218 219 220	H01-SWC2A112FS1-8	SWITACT VERTICAL SKQNADD010 12V 50MA	
Q100 101	H01-TRMPSA56YNA-5	TR-SLPLF MPSA56 Y P -500MI0A -300V	
	3SA-3072US-FCST-1-3	**AC ESABD SMD FRONT BD AVR630**	
C111 112 113 115 116 118 119 120 121	CZJII0101BE-2	CCCFMIC 100P0F +5% -5% 50.0V NP0	
C220 221	CZKII0223BC-6	CCCFMIC 22N0F +10% -10% 50.0V X7R 0603	
C100 101	CZKII0821BC-8	CCCFMIC 820P0F +10% -10% 50.0V X7R	
C102 110 122 132 200 201	CZZFI0104BF-8	CCCFMIC 100N0F +80% -20% 16.0V Y5V	
D100 102 103 104 105 200 201 202 203	H01-DS1S50094NB-A	D-SLP 1SS355 35.0V 225MI0A	
IC101	H01-ICBU4094BD3-2	IC CMOS BU4094BF SOP16	
J149 151 153 154 156 157 301 302 303 R901 902 903	RS3AD0000NA-0	RMGCFMIC 0 OHM +0% 62MI5W	
R103	RS3AD0100NA-7	RMGCFMIC 10R0 OHM +5% 62MI5W	
R161	RS3AD0101NA-5	RMGCFMIC 100R0 OHM +5% 62MI5W	
R1 110 119 120 121 136 160 162 163 164 201 211	RS3AD0102NA-3	RMGCFMIC 1K0 OHM +5% 62MI5W	
R2	RS3AD0104NA-A	RMGCFMIC 100K0 OHM +5% 62MI5W	
R202 212	RS3AD0122NA-8	RMGCFMIC 1K2 OHM +5% 62MI5W	
R203 213	RS3AD0152NA-A	RMGCFMIC 1K5 OHM +5% 62MI5W	
R209 219	RS3AD0183NA-A	RMGCFMIC 18K0 OHM +5% 62MI5W	
R109 134	RS3AD0221NA-6	RMGCFMIC 220R0 OHM +5% 62MI5W	
R204 214	RS3AD0222NA-4	RMGCFMIC 2K2 OHM +5% 62MI5W	
R205 215	RS3AD0272NA-0	RMGCFMIC 2K7 OHM +5% 62MI5W	
R206 216	RS3AD0332NA-8	RMGCFMIC 3K3 OHM +5% 62MI5W	
R806 807 810 811	RS3AD0391NA-3	RMGCFMIC 390R0 OHM +5% 62MI5W	
R122 804 805 808 809	RS3AD0471NA-5	RMGCFMIC 470R0 OHM +5% 62MI5W	
R102	RS3AD0472NA-3	RMGCFMIC 4K7 OHM +5% 62MI5W	
R104	RS3AD0473NA-1	RMGCFMIC 47K0 OHM +5% 62MI5W	
R207 217	RS3AD0562NA-2	RMGCFMIC 5K6 OHM +5% 62MI5W	
R800 801	RS3AD0681NA-5	RMGCFMIC 680R0 OHM +5% 62MI5W	
R100 101	RS3AD0683NA-1	RMGCFMIC 68K0 OHM +5% 62MI5W	
R208 218	RS3AD0822NA-2	RMGCFMIC 8K2 OHM +5% 62MI5W	
Q102 103 801 802 803 804 805	H01-TRDTC114YNI-5	TR-SSD DTC114YKA N 10K0 OHM 47K0 OHM	
Q800	H01-TRKTD1304ND-5	TR-SLPSWA KTD1304 N 20V 300MI0A SOT-23	
043	XYGLU00K5RD-7	GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3072US-MAMI-1-A	**AC EMBD IMA MAIN BD AVR630**	
	PBC11KMAI20-3	AVR630 MAIN SINGLE PCB 330MM*245MM FR-1	
C515	CEHFA0228MN-3	CE 2MI2F +20% 16.0V 85C	
C514	H01-CEHFA0688MN-5	CE 6MI8F +20% 16.0V 85C 16X31.5 SHL	
C509 510	CEHHC0228MN-A	CE 2MI2F +20% 35.0V 85C	
C517	CEHIA0228MN-4	CE 2MI2F +20% 50.0V 85C	
C504 505	H01-CEHJA0159NN-5	CAP ELEC DL 15000uF 63.0V 85C	
C303 304 305 306 421 422 423 424	CEHJA0477MN-9	CE 470U0F +20% 63.0V 85C	
D501	H01-DRBU10040BA-6	D-BRDLC BRIDGE BU10-04	
D503	H01-DRBU604F0NA-9	DIODE BRIDGE BU6-04F FRONTIER	
D502 505	H01-DRW204F00BA-A	DIODE BRIDGE W2-04F FRONTIER	
IC53	H01-ICBA033T0I2-9	IC-REGPOSFXD BA033T NORMAL	
IC55	H01-ICKIA7805I2-7	IC-REGPOSFXD KIA7805API NORMAL TO-220IS	
IC59	H01-ICKIA7812I2-2	IC-REGPOSFXD KIA7812API NORMAL	
IC54	H01-ICKIA7824I2-7	IC-REGPOSFXD KIA7824API TO-220IS NORMAL	
IC56	H01-ICKIA7905I2-5	IC-REGNEGFXD KIA7905PI NORMAL	
IC22	H01-ICLM02068D2-A	IC-OPERAMP NJM2068M DUAL SOP8	
IC51	H01-ICLM07815BD-0	IC-REGPOSFXD KIA7815API NORMAL	
IC52	H01-ICLM07915BD-9	IC-REGNEGFXD KIA7915API NORMAL TO-220AB	
L301 302 401 402	H01-LCNNNA050NA-1	LFA 1MM 10MM 5 LEFT 0.0MM NONE	
R378 379 471 472	H01-RI3IC022BEN-8	RW 220MI0 OHM +5% 5.0W 100PPM/'C -100PPM/'C	
R392 393 475 476	RM3FC0100BN-7	RMOF 10R0 OHM +5% 1.0W	
R505	RM3GC0100CN-A	RMOF 10R0 OHM +5% 2.0W	
R514	RM3GC022ACN-A	RMOF 2R2 OHM +5% 2.0W	
R504 506 507 508 510 515	RM3GC033ACN-3	RMOF 3R3 OHM +5% 2.0W	
R509	RM3GC047ACN-9	RMOF 4R7 OHM +5% 2.0W	
PO72	H01-RP3NA0101NN-A	POS 100R0 OHM 16.0V	
PO71	H01-RP3NA0101NZ-3	POS 100R0 OHM 16.0V	
VR71 72 73 74	RT6BA0201NB-A	PR 200R0 OHM +30% 100MI0W	
NJ13	SO0A18P8CNN-7	JACK-TELE SNAP-IN GOLDEN TELECOM GDL1-8P8C 8T BK 0 0	
NJ14	H01-SOPA81900NN-8	CONN-SPE TERMINAL SPKR 8P SH081136JP FE 19MM 8 -- 0 0	
NJ12	H01-SORA40RSANN-6	JACK RCA 4P JB040131ZN GN BN PP TA	
NJ11	H01-SORA40RSCNN-A	JACK RCA 4P JB040131QN WH BU RD GY	
Q329 330 433 434	H01-TR2SA1859BC-2	TR-SHPLF 2SA1859A P -2.0A	
Q335 336 439 440	H01-TR2SA1986BE-5	TR-SHPLF 2SA1986-R P -15.0A	
Q701 702 703 704	H01-TR2SC4137BE-0	TR-SHPLF 2SC4137 N 100MI0A 20V	
Q331 332 435 436	H01-TR2SC4883BC-8	TR-SHPLF 2SC4883A N 2.0A	
Q333 334 437 438	H01-TR2SC5358BO-6	TR-SHPLF 2SC5358-R N 15.0A	
REWORK DSPBD W601	H01-WC1164605C1-7	WCL 460-05-05 UL1007 HOOK-UP 16 460MM BK 05 05	
W401	H01-WC1180905C1-1	WCL 090-05-05 UL1007 HOOK-UP 18 90MM BK 05 05	
W301	H01-WC1221905C1-9	WCL 190-05-05 UL1007 HOOK-UP 22 190MM BK 05 05	
N801 802 803 804	H01-WG02SB80800-0	WIRECONASY UNIQUE 2 80MM UL1007 PVC DISCRETE 26	
N807 809	H01-WG03SB82100-7	WIRECONASY DL 2.0MM 3P 210MM UL1007 RIBBON 26 12	
N808	H01-WG03SB84400-4	WIRECONASY DL 2.0MM UNIQUE 3P 440MM UL1007 PVC DISCRETE 26 1	
P812 813 815 816	H01-WN02SB00000-9	CONN 2.0MM 2 MA ST NAT GT201-2P-TS	
P801 802 803 804 810	H01-WN02SD00000-7	CONN 2.5MM 2 MA ST NAT 0 0	
P805 814	H01-WN03SB00000-6	CONN 2.0MM 3 MA ST NAT GT201-3P-TS	
P807	H01-WN03SE00000-3	CON 3.96MM PITCH MOLEX 35313-0310	
P806	H01-WN04SB00000-3	CONN 2.0MM 4 MA ST NAT GT201-4P-TS	
P808	H01-WN08SD00000-0	CONN 2.5MM 8 MA ST NAT 0 0	
P811	H01-WN19SB00000-6	CONN 2.0MM 19 MA ST NAT MOLEX 35336-1910 0 0	
N805	H01-WS8263605EN-8	WIRECONASY DL 2.0MM 8P 360MM UL1533 SHIELD 26 1	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
N806	H01-WSE263905EN-5	WIRECONASY DL 2.0MM 15P 390MM UL1533 SHIELD 26 1	
	XY0N211N5WH-4	CABLE TIE W=0.2MM L=11.5CM WHITE @ STRIP	
	XY0P523K000-A	WIRE,IRON,D=0.5MM,N.W=23KG @KG	
	XY0P801K000-A	WIRE TIN D=0.8MM N.W=1.0KG @KG	
	XY1N127N0WH-5	ADHESIVE WHITE D=1.1CM L=27CM @KG	
	XY1N218M3SW-4	GLUE FURROW W=12MML=18.3M SS WHITE @ROLL	
	XY1P202K000-1	WIRE, TIN, D=1.2MM N.W=2.0KG @KG	
	XY5020000AA-0	ADHESIVE SUP-GLUE "AA" #502 TRANS @BOTTL	
	XY57501K0YW-0	GLUE, YELLOW, N.W=1.0KG #575 @KG	
	XY6R301K000-0	BAR,TIN,63/37,N.W=1.0KG @KG	
	XY74601K0WH-9	OINTMENT HTC #SDL-746 NW=1.0KG WHITE @KG	
	XYALC01G000-2	ALCOHOL V=1.0GALLON @GALLON	
	XYRF801G000-7	FLUX #RF-800 V=1.0 GALLON @ GALLON	
	XYWAX10K000-6	ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG	
	XYWD405G000-0	CLEANER,#WD-40,V=5.0 GALLONS @GALLONS	
HK11	H01-ZMC11HS0300-9	H/SINK REG 118*20*60	
HK12	H01-ZMC11HS0400-0	AC HEATSINK DIODE 47X26X12 AVR630 -- ME	
070	ZSTBM3010BB-5	SCREW ST BH 3X10	
080	ZSTBM3012BY-A	SCREW ST BH 3X12 PIVOT	
060	ZSTWM3008BY-8	SCREW ST WPH 3X8	
090	ZWM803305PZ-1	WASHER PLAIN 3	
	3SA-3072US-MAAA-1-8	**AC ESABD IAA MAIN BD AXIAL AVR630**	
C101 102 103 104 107 108 109 110 111 112 113 114 115 116 117 118 209	CCKID0101NA-7	CC 100P0F +10% -10% 50.0V Y5P	
C307 308 313 314 403 404 569 570	CCKID0271NN-0	CC 270P0F +10% -10% 50.0V 2B4	
C433 601 602	CCMFD0103NN-4	CC 10N0F +20% -20% 16.0V Y5S	
C333 434	CCMFD0472NN-6	CC 4N7F +20% -20% 16.0V Y5R	
C119 120 212 214 527	CCZID0104NA-2	CC 100N0F +80% -20% 50.0V F	
D205 206 301 302 303 304 305 306 307 308 401 402 403 404 405 406 407 408 409 410 411 412	H01-DG1N04148NB-4	D-SLP 1N4148 100.0V 150E-3A	
D207	H01-DZ1N05231NB-1	D-ZENER 1N5231B 5.1V 500MI0W	
D204	H01-DZMTZ12V0NB-0	D-ZENER MTZJ 12.0V 500MI0W	
R303 304 477 478	RC3DI0100IN-2	RCF 10R0 OHM +5% 250MI0W	
R101 102 105 106 109 110 113 114 213 215 221 353 354 369 370 457 458 459 460 609 614	RC3DI0101IN-0	RCF 100R0 OHM +5% 250MI0W	
R211 603	RC3DI0102IN-9	RCF 1K0 OHM +5% 250MI0W	
R485 516 605 606 608 610 611 613	RC3DI0103IN-7	RCF 10K0 OHM +5% 250MI0W	
R207 214 216 217 218 219 220 309 310 479 480 503 604	RC3DI0104IN-5	RCF 100K0 OHM +5% 250MI0W	
R701 707 710 711	RC3DI0122IN-3	RCF 1K2 OHM +5% 250MI0W	
R607 612	RC3DI0123IN-1	RCF 12K0 OHM +5% 250MI0W	
R363 364 365 366 461 462 463 464	RC3DI0150IN-9	RCF 15R0 OHM +5% 250MI0W	
R380 381 386 387 481 483 488 490	RC3DI0152IN-5	RCF 1K5 OHM +5% 250MI0W	
R341 342 343 344 384 385 437 438 439 440 482 489	RC3DI0153IN-3	RCF 15K0 OHM +5% 250MI0W	
R311 312 313 314 405 406 407 408	RC3DI0162IN-2	RCF 1K6 OHM +5% 250MI0W	
R339 340 345 346 347 348 349 350 433 434 435 436 441 442 443 444	RC3DI0201IN-7	RCF 200R0 OHM +5% 250MI0W	
R317 318 319 320 321 322 409 410 411 412 413 414	RC3DI0221IN-1	RCF 220R0 OHM +5% 250MI0W	
R390 391 486 492	RC3DI0223IN-8	RCF 22K0 OHM +5% 250MI0W	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
R371 372 373 374 465 466 467 468 615	RC3DI022AIN-2	RCF 2R2 OHM +5% 250MI0W	
R497 702 705 708 709	RC3DI0271IN-8	RCF 270R0 OHM +5% 250MI0W	
R209 498	RC3DI0273IN-4	RCF 27K0 OHM +5% 250MI0W	
R224	RC3DI0274IN-2	RCF 270K0 OHM +5% 250MI0W	
R301 302 401 402	RC3DI0331IN-5	RCF 330R0 OHM +5% 250MI0W	
R225 305 306 403 404	RC3DI0333IN-1	RCF 33K0 OHM +5% 250MI0W	
R382 383 484 487 491 501 502	RC3DI0393IN-5	RCF 39K0 OHM +5% 250MI0W	
R307 308 415 416	RC3DI0433IN-8	RCF 43K0 OHM +5% 250MI0W	
R315 316 593 594	RC3DI0471IN-0	RCF 470R0 OHM +5% 250MI0W	
R223	RC3DI0513IN-A	RCF 51K0 OHM +5% 250MI0W	
R323 324 325 326 329 330 333 334 335 336 337 338 421 422 423 424 425 426 427 428 429 430 431 432	RC3DI0561IN-A	RCF 560R0 OHM +5% 250MI0W	
R375 376 469 470	RC3DI0820IN-1	RCF 82R0 OHM +5% 250MI0W	
R493	RC3DI0822IN-8	RCF 8K2 OHM +5% 250MI0W	
R388 389 473 474	RC3EG0100LN-4	RCF 10R0 OHM +5% 500MI0W	
R327 328 417 418	RM1DI0333IN-4	RMF 33K0 OHM +1% 250MI0W	
R331 332 419 420	RM1DI1451IN-4	RMF 1K45 OHM +1% 250MI0W	
R351 352 367 368 445 446 447 448	H01-RM3EG0100LN-A	RMF 10R0 OHM +5% 500MI0W	
	3SA-3072US-MAAR-1-A	**AC ESABD IAR MAIN BD RADIAL AVR630**	
C315 316 409 410	CCDIC0030NE-3	CC 3P0F +0P25F -0P25F 50.0V NP0	
C317 318 411 412	CCKIC0181NA-0	CC 180P0F +10% -10% 50.0V Y5P	
C329 330 425 426	CCKIC0222NA-1	CC 2N2F +10% -10% 50.0V Y5P	
C331 332 407 408	CEHEC0227NN-A	CE 220U0F +20% 10.0V 85C	
C432	CEHEC0477MN-A	CE 470U0F +20% 10.0V 6.3X11 85C	
C206 208 213 309 310 405 406 526	CEHGC0107NN-6	CE 100U0F +20% 25.0V 6.3X1185C	
C210	CEHIC0105NN-7	CE 1U0F +20% 50.0V 5X11 85C	
C211 301 302 319 320 321 322 401 402 413 414 415 416 429 518 519 520 521 522 523	CEHIC0106NN-5	CE 10U0F +20% 50.0V 85C	
C207	CEHIC0475NN-7	CE 4U7F +20% 50.0V 85C	
C325 326 327 328 417 418 419 420	CFIJC0104NN-7	CPM 100N0F +10% 63.0V	
C501 502 503	CFIOC0104NN-5	CPM 100N0F +10% 250.0V	
C323 324 430 431	CFLJC0683NN-7	CPM 68N0F +5% 63.0V	
C506 507 508 511 512 513 516 528 529	CPIKC0473NN-0	CPF 47N0F +10% 100.0V	
F501 502 503 504 505 506	H01-FURN2200006-6	FUSE T 2A 250V 7.6X8.6 SS-5 SAVE FUSETECH	
Q309 310 411 412	H01-TR2SA1145NA-2	TR-SLPLF 2SA1145Y TO-92MOD P -50MI0A -150V	
Q443	H01-TRKRC107MNA-9	TR-SLPSWA KRC107M N	
Q315 316 319 320 327 328 417 418 421 422 431 432 442	H01-TRKTA1024NA-7	TR-SLPLF KTA1024 Y P 50MI0A -150V	
Q605 607	H01-TRKTA1266NA-0	TR-SLPLF KTA1266 Y P 150MI0A	
Q311 312 410 413 414	H01-TRKTA1268NA-4	TR-SHPLF KTA1268BL P 100MI0A 120V	
Q307 308 407 408 426 441 606 608	H01-TRKTC3198NA-3	TR-SLPLF KTC3198BL N 150MI0A	
Q301 302 303 304 305 306 313 314 337 338 401 402 403 404 405 406 409 415 416 425	H01-TRKTC3200NA-9	TR-SHPLF KTC3200BL N 100MI0A 120V	
Q317 318 321 322 323 324 419 420 423 424 429 430	H01-TRKTC3206NA-A	TR-SLPLF KTC3206 Y N 50MI0A 150V	
Q602	H01-TRKTD1302NA-0	TR-SLPLF KTD1302 B N 300MI0A 20V	
G101 102	H01-ZNMSA4004SN-4	TERMLUG GND	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3072US-PA00-1-2	**AC BOM PKG AVR630**	
	H01-ATALF039ABK-A	ANTENNA WIRE ANTENNA LOOP CT01-AM 0 0	
	BTA3A1511SF-0	BATTERY ALKALINE 1.5V AAA	
	H01-RYC1101HA00-9	REMOCON AVR630	BK
	H01-RYD0201HA00-6	REMOCON AVR630EU	IB
	H01-RYC1202HA00-5	REMOCON ZONE 2	
	H01-WAB01200203-9	ANTENNA WIRE 75 CT02-FM 0 0	BK
	H01-WAD01200303-3	ANTENNA WIRE 75 OHM WIRE CT03-FM 00	IB
	H01-WAUSA2103BK-1	POWER CORD WS-004C+002E SJT#14*2C L=2M	BK
	H01-WAD022000BK-2	WR002 H05VVF 0.75MMSQ 2G BLACK 2000MM	IB
	XY0M51K5M00-3	MEMBRANE POLY TRANS W=0.5M L=1.5KM @ROLL	
	XY1N218M3CL-9	GLUE TRANSPARENT W=12MM L=18.3M @ROLL	
	XY7N636M5CL-8	Glue, Transparent,W=76mm, L=36.5m @m	
	XYGLAA5K200-3	GLASS CLEANER,N.W=0.52KG @BOTTL	
	XYJBLA4L800-5	WAX JUBILEE, CLEANER V=0.48LITER @BOTTLE	
	ZBP00020350-4	POLYBAG BATTERY	
	ZBP00122051-8	BAG PE 330 X245 T0.05	
	ZHC1201AAWH-A	FILM SHEET PE 920 X 1000	
	ZKC1101HB00-9	MANUAL AVR630	BK
	ZKD0201HA00-4	MANUAL AVR630 EU	IB
	ZKC1104HA00-A	BOX CARTON AVR630	BK
	ZKD0204HA00-3	BOX CARTON AVR630EU	IB
	ZKC1113HA00-9	CARD WARRANTY	
	ZKC1116HA00-8	QUICK SETUP GUIDE AVR630	
	ZKC1173HA00-1	LABEL BARCODE AVR630	BK
	ZKD0273HA00-5	LABEL BARCODE AVR630EU	IB
	ZKC11H96A00-1	POLISHING CLOTH	
	ZKC1214HA00-A	LABEL SAFETY LEAFLET	BK
	ZKD0114HA00-4	SAFETY MANUAL EU	IB
	ZKC1263HA00-0	INSERT RS232 NOTE PAPER	
	ZKC1270HA00-7	LABEL "PLEASE"	
	ZKGEN43HA00-0	CARD INSERT ENVELOPE	
	ZKGEN56HA00-5	ENVELOPE POLISHING CLOTH	
	ZKGEN73HA00-7	LABEL BARCODE BLANK	
	ZQC1101HAWH-2	CUSHION POLY EPS RIGHT AVR430/630	
	ZQC1102HAWH-9	CUSHION POLY EPS LEFT AVR430/630	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3072US-POMI-1-8	**AC EMBD IMA PRO BD AVR630**	
	PBC11KPOB20-7	AVR630 PROCESSOR DUAL PCB 209MM*170MM FR-4	
C20	CEHFC0106NN-4	CE 10U0F +20% 16.0V 85C 5X11	
SK1	H01-RLL1296122A-5	RELAYSGNL 12.0V 960.0OHM 3.0A	
NJ51 52 53 54 55	H01-SORA40GNDNN-7	JACK RCA 4P JB040131PN WWRR	
P20 20-1	H01-WC2260755CG-7	WIRECONASY DL 2.0MM 02P 75MM ANG UL1007 RIBBON 26 1 B2011H02	
P13	H01-WN03SB00000-6	CONN 2.0MM 3 MA ST NAT GT201-3P-TS	
P1 3 12	H01-WN04SB00000-3	CONN 2.0MM 4 MA ST NAT GT201-4P-TS	
P4	H01-WN06SB00000-8	CONN 2.0MM 6 MA ST NAT GT201-6P-TS	
P10	H01-WN08SB00000-2	CONN 2.0MM 8 MA ST NAT GT201-8P-TS	
P2	H01-WN11AB00000-0	CONN 2.0MM 11 MA R NAT SOCKET MOLEX 35237-1110 0 0	
P9	H01-WN15SB00000-7	CONN 2.0MM 15 MA ST NAT GT201-15P-TS	
P6	H01-WN17AB00000-4	CONN 2.0MM 17 MA R NAT SOCKET MOLEX 35237-1710 0 0	
N2 P7	H01-WN19AB00000-9	CONN 2.0MM 19 MA R NAT SOCKET MOLEX 35237-1910 0 0	
	XY0N618M3SW-A	GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL	
	XY0P801K000-A	WIRE TIN D=0.8MM N.W=1.0KG @KG	
	XY1N209M0DW-4	GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL	
	XY1N218M3SW-4	GLUE FURROW W=12MML=18.3M SS WHITE @ROLL	
	XY1P202K000-1	WIRE, TIN, D=1.2MM N.W=2.0KG @KG	
	XY30155G00-0	TCE,CLEANER,-301#,V=55GALL0N,TYPELESS @GALLON	
	XY4N836M5CL-9	GLUE TRANSPARENT W=48MM L=36.5M @ROLL	
	XY6R301K000-0	BAR,TIN,63/37,N.W=1.0KG @KG	
	XYALC01G000-2	ALCOHOL V=1.0GALLON @GALLON	
	XYGLU00K5RD-7	GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG	
	XYJUI00K5GY-5	JUICE TIN N=0.5KG GREY @KG	
	XYRF801G000-7	FLUX #RF-800 V=1.0 GALLON @ GALLON	
	XYWAX10K000-6	ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG	
	3SA-3072US-POAR-1-8	**AC ESABD IAR PRO BD RADIAL AVR630**	
C79 80 82 83 113 114 116 118 139 140 142 144	H01-CEHFC0106AH-5	CE 10U0F +20% 16.0V 85C AH SAMYOUNG	
C6 7 13 14 16 17 19 37 38 40 41 53 54 56 57 59 60 75 76 84 85 87 88 90 91 106 107 121 123 124 125 126 131 147 149 151 152 159 160 162 164 169 170 172 174 190 195 196 197 198 205 206 207	CEHFC0106NN-4	CE 10U0F +20% 16.0V 85C 5X11	
C5 8 15 18 39 42 55 58 74 77 78 81 86 89 92 95 96 97 98 99 100 101 102 103 104 105 108 109 112 119 120 122 127 129 132 133 138 145 146 153 158 165 168 175 189 201 202 208 209 210 224 225	CEHFC0476NN-4	CE 47U0F +20% 16.0V 85C	
C176 177	CEHGC0337NN-0	CE 330UI0F +20% 25V 85C	
C221 222	CEHIC0475NN-7	CE 4U7F +20% 50.0V 85C	
GND1	H01-ZNMSA4004SN-4	TERMLUG GND	
	3SA-3072US-POSB-1-9	**AC ESABD SMD BOT PRO BD AVR630**	
C1 2 3 4 9 10 11 12 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 43 44 45 46 47 48 49 50 61 62 63 64 65 67 69 70 71 72 73 110 117 128 135 136 143 155 156 163 166 173 178 179 180 181 182 183 184 191 192 193 194 228 229	CZJII0101BE-2	CCCFMIC 100P0F +5% -5% 50.0V NP0	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
C215 216	CZJII0103CC-1	CCCFMIN 10N0F +-5% 50.0V X7R 0805	
C188 203 204 226 227	CZJII0330BE-9	CCCFMIC 33P0F +5% -5% 50.0V NP0	
C130 134	CZJII0331BE-7	CCCFMIC 330P0F +5% -5% 50.0V NP0	
C94 148	CZKII0222BC-8	CCCFMIC 2N2F +10% -10% 50.0V X7R	
C51 52 185 186 187 211	CZZFI0104BF-8	CCCFMIC 100N0F +80% -20% 16.0V Y5V	
D2	H01-DS0KDS160NB-4	D-SLP KDS160 85.0V 100MI0A	
IC29 30	H01-ICLM02068D2-A	IC-OPERAMP NJM2068M DUAL SOP8	
IC10	H01-ICTC9273NDA-0	IC-SWITCH TC9273F-004 SOP28 ANALOG SWITCH	
J7 8 9 10 11 12 26 38 39 40 41 R317 318	RS3AD0000NA-0	RMGCFMIC 0 OHM +0% 62MI5W	
R1 10 11 13 18 30 31 44 63 64 77 79 82 88 89 98 101 106 107 112 121 126 131 133 136 137 141 142 166 167 171 172 174 184 185 189 195 197 198 201 204 231 238 260 273 288	RS3AD0101NA-5	RMGCFMIC 100R0 OHM +5% 62MI5W	
R3 4 27 29 32 34 46 48 49 51 57 59 61 71 91 92 93 94 95 96 138 139 140 143 144 145 150 151 152 153 154 155 168 169 170 221 229 247 254 256 264 269 277 279 286 293 301 303 310 324 325 326 329 334 343 344 345 346 347 348 349 350	RS3AD0102NA-3	RMGCFMIC 1K0 OHM +5% 62MI5W	
R2 5 12 14 15 16 17 21 26 28 33 35 40 41 42 43 45 47 50 52 58 60 65 66 67 68 85 86 99 100 103 104 109 110 113 114 119 120 123 124 129 130 146 147 161 162 175 176 181 183 186 188 191 192 193 194 196 199 203 214 217 218 225 233 234 236 239 241 244 245 246 2	RS3AD0104NA-A	RMGCFMIC 100K0 OHM +5% 62MI5W	
R134 163 164 165	RS3AD0123NA-6	RMGCFMIC 12K0 OHM +5% 62MI5W	
R235 237	RS3AD0152NA-A	RMGCFMIC 1K5 OHM +5% 62MI5W	
R132 255 263 270 278 294 302	RS3AD0202NA-A	RMGCFMIC 2K0 OHM +5% 62MI5W	
R208 209 212 216	RS3AD0221NA-6	RMGCFMIC 220R0 OHM +5% 62MI5W	
R210 213 220 226 259 268 274 292 298 315 327 336 337	RS3AD0222NA-4	RMGCFMIC 2K2 OHM +5% 62MI5W	
R200 202	RS3AD0242NA-9	RMGCFMIC 2K4 OHM +5% 62MI5W	
R205 249	RS3AD0272NA-0	RMGCFMIC 2K7 OHM +5% 62MI5W	
R20 56 62 74 115 116 117 118	RS3AD0333NA-6	RMGCFMIC 33K0 OHM +5% 62MI5W	
R222 230	RS3AD0362NA-A	RMGCFMIC 3K6 OHM +5% 62MI5W	
R177 179	RS3AD0432NA-4	RMGCFMIC 4K3 OHM +5% 62MI5W	
R6 9 22 25 36 39 73 76 127 148 149 178 182 187 206 211 284 335 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375	RS3AD0471NA-5	RMGCFMIC 470R0 OHM +5% 62MI5W	
R128	RS3AD0472NA-3	RMGCFMIC 4K7 OHM +5% 62MI5W	
R69 70 102 105 240 250 283 285 307 309 312	RS3AD0512NA-6	RMGCFMIC 5K1 OHM +5% 62MI5W	
R108 111 173 180 207 215	RS3AD0821NA-4	RMGCFMIC 820R0 OHM +5% 62MI5W	
R248	RS3AD0912NA-1	RMGCFMIC 9K1 OHM +5% 62MI5W	
Q20	H01-TRDTA114YNI-9	TR-SSD DTA114YKA P 10K0 OHM 47K0 OHM	
Q54	H01-TRDTC114YNI-5	TR-SSD DTC114YKA N 10K0 OHM 47K0 OHM	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
Q1 2 19 24 26 27 28 29 30 31 33 36 38 39 40 42 44 45 46	H01-TRKTD1304ND-5	TR-SLPSWA KTD1304 N 20V 300MI0A SOT-23	
	3SA-3072US-POST-1-4	**AC ESABD SMD TOP PRO BD AVR630**	
C223	CZJII0101BE-2	CCCFMIC 100P0F +5% -5% 50.0V NP0	
C217 218	CZJII0103CC-1	CCCFMIN 10N0F +-5% 50.0V X7R 0805	
C219 220	CZJII0150CE-A	CCCFMIN 15P0F +5% -5% 50.0V NP0 0805	
C66 68 111 115 137 141 154 157 161 167 171 199 200	CZJII0330BE-9	CCCFMIC 33P0F +5% -5% 50.0V NP0	
C213 214	CZJII0682CC-3	CCCFMIN 6N8F +5% -5% 50.0V X7R 0805	
C93 150	CZKII0222BC-8	CCCFMIC 2N2F +10% -10% 50.0V X7R	
C212	CZZFI0104BF-8	CCCFMIC 100N0F +80% -20% 16.0V Y5V	
D8 9 12 14 21	H01-DSUDZ09V1NB-7	D-ZENER UDZS 9.1B 9.1V 200MI0W	
IC5 14	H01-ICKIC9162DA-5	IC-SWITCH KIC9162AF SOP28 ANALOG SWITCH	
IC3	H01-ICKIC9163DA-7	IC-SWITCH KIC9163AF SOP28 ANALOG SWITCH	
IC2 18	H01-ICKIC9459D5-8	IC-LOWFREQ KIC9459F SOP24 TONE/VOL/BAL/MUTE	
IC1 4 7 8 9 11 12 13 15 16 17 20 21 23 24 25 26 27	H01-ICLM02068D2-A	IC-OPERAMP NJM2068M DUAL SOP8	
IC19	H01-ICLMO9482DA-5	IC-LOWFREQ KIC9482F SOP28 TONE/VOL/BAL/MUTE	
IC22	H01-ICNJM4556DM-0	IC-OPERAMP NJM4556AM DUAL OP	
IC6	H01-ICTC9273NDA-0	IC-SWITCH TC9273F-004 SOP28 ANALOG SWITCH	
IC28	H01-ICTC9481FDA-0	IC-LOWFREQ TC9481F SOP28 TONE	
R75 78 232 242 243 253 280 290 304 314	RS3AD0101NA-5	RMGCFMIC 100R0 OHM +5% 62MI5W	
R72 80 81 122 125	RS3AD0102NA-3	RMGCFMIC 1K0 OHM +5% 62MI5W	
R135 158	RS3AD0123NA-6	RMGCFMIC 12K0 OHM +5% 62MI5W	
R223 262 271 295	RS3AD0183NA-A	RMGCFMIC 18K0 OHM +5% 62MI5W	
R7 8 23 24 37 38 53 54 224 228 257 261 272 276 296 300 316 330 333	RS3AD0222NA-4	RMGCFMIC 2K2 OHM +5% 62MI5W	
R156 157 159 160	RS3AD0332NA-8	RMGCFMIC 3K3 OHM +5% 62MI5W	
R19 55 83 84 87 90 97 190 219 265 266 267 291 332	RS3AD0333NA-6	RMGCFMIC 33K0 OHM +5% 62MI5W	
R227 258 275 299 331	RS3AD0474NA-A	RMGCFMIC 470K0 OHM +5% 62MI5W	
Q3 13 14 17 23 25 32 34 35 37 41 43 50 52	H01-TRDTA114YNI-9	TR-SSD DTA114YKA P 10K0 OHM 47K0 OHM	
Q4 7 8 9 10 11 12 15 16 51 53 58 59	H01-TRKTD1304ND-5	TR-SLPSWA KTD1304 N 20V 300MI0A SOT-23	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3072US-SRMI-1-6	**AC EMBD IMA SURROUND BD AVR630**	
	PBC11KSRI20-5	AVR630 SURROND SINGLE PCB 330MM*247MM	
C301 302 401 402 501 502	CEHJA0477MN-9	CE 470U0F +20% 63.0V 85C	
L301 401 501	H01-LCNNNA050NA-1	LFA 1MM 10MM 5 LEFT 0.0MM NONE	
R338 438 538	H01-RI3IC022BEN-8	RW 220MI0 OHM +5% 5.0W 100PPM/'C -100PPM/'C	
R345 445 545	RM3FC0100BN-7	RMOF 10R0 OHM +5% 1.0W	
PO51	H01-RP3NA0101NN-A	POS 100R0 OHM 16.0V	
PO52	H01-RP3NA0101NZ-3	POS 100R0 OHM 16.0V	
VR31 32 51	H01-RT7EA0201NB-6	PR 200R0 OHM +20% 500MI0W	
NJ31	H01-SOPA619BKNN-7	CONN-SPE TERMINAL SPKR 6P SH0611708P FE 19MM 6 BK 0 0	
Q316 416 516	H01-TR2SA1859BC-2	TR-SHPLF 2SA1859A P -2.0A	
Q319 419 519	H01-TR2SA1986BE-5	TR-SHPLF 2SA1986-R P -15.0A	
Q314 414 514	H01-TR2SC4137BE-0	TR-SHPLF 2SC4137 N 100MI0A 20V	
Q317 417 517	H01-TR2SC4883BC-8	TR-SHPLF 2SC4883A N 2.0A	
Q318 418 518	H01-TR2SC5358BO-6	TR-SHPLF 2SC5358-R N 15.0A	
REWORK	H01-WC1181655C1-0	WCL 165-05-05 UL1007 HOOK-UP 18 165MM BK 05 05	
W401	H01-WC1220905C1-A	WCL 090-05-05 UL1007 HOOK-UP 22 90MM BK 05 05	
N301	H01-WG03SB84200-0	WIRECONASY DL 2.0MM UNIQUE 3P 420MM UL1007 PVC DISCRETE 26 1	
P301 308 309	H01-WN02AD00000-A	CONN 2.5MM 2 MA R NAT 0 0	
P307	H01-WN03SB00000-6	CONN 2.0MM 3 MA ST NAT GT201-3P-TS	
P303	H01-WN03SE00000-3	CON 3.96MM PITCH MOLEX 35313-0310	
P304	H01-WN04SE00000-0	CON 3.96MM PITCH MOLEX 35313-0410	
N306	H01-WS6262605EN-6	WIRECONASY DL 2.0MM 6P 260MM UL1533 SHIELD 26 1	
	XY0N211N5WH-4	CABLE TIE W=0.2MM L=11.5CM WHITE @ STRIP	
	XY0P523K000-A	WIRE,IRON,D=0.5MM,N.W=23KG @KG	
	XY0P801K000-A	WIRE TIN D=0.8MM N.W=1.0KG @KG	
	XY1N218M3SW-4	GLUE FURROW W=12MML=18.3M SS WHITE @ROLL	
	XY1P202K000-1	WIRE, TIN, D=1.2MM N.W=2.0KG @KG	
	XY57501K0YW-0	GLUE, YELLOW, N.W=1.0KG #575 @KG	
	XY6R301K000-0	BAR,TIN,63/37,N.W=1.0KG @KG	
	XY74601K0WH-9	OINTMENT HTC #SDL-746 NW=1.0KG WHITE @KG	
	XYALC01G000-2	ALCOHOL V=1.0GALLON @GALLON	
	XYRF801G000-7	FLUX #RF-800 V=1.0 GALLON @ GALLON	
	XYWAX10K000-6	ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG	
	XYWD405G000-0	CLEANER,#WD-40,V=5.0 GALLONS @GALLONS	
	3SA-3072US-SRAA-1-4	**AC ESABD IAA SURROUND BD AXIAL AVR630**	
D301 302 303 304 401 402 403 404 501 502 503 504 601	H01-DG1N04148NB-4	D-SLP 1N4148 100.0V 150E-3A	
R326 336 426 436 526 536	RC3DI0101IN-0	RCF 100R0 OHM +5% 250MI0W	
R601 606	RC3DI0103IN-7	RCF 10K0 OHM +5% 250MI0W	
R346 446 546 605	RC3DI0104IN-5	RCF 100K0 OHM +5% 250MI0W	
R329 429 529	RC3DI0122IN-3	RCF 1K2 OHM +5% 250MI0W	
R328 335 428 435 528 535	RC3DI0150IN-9	RCF 15R0 OHM +5% 250MI0W	
R339 341 439 441 539 541	RC3DI0152IN-5	RCF 1K5 OHM +5% 250MI0W	
R320 321 340 420 421 440 520 521 540	RC3DI0153IN-3	RCF 15K0 OHM +5% 250MI0W	
R309 310 409 410 509 510	RC3DI0162IN-2	RCF 1K6 OHM +5% 250MI0W	
R319 322 323 324 419 422 423 424 519 522 523 524	RC3DI0201IN-7	RCF 200R0 OHM +5% 250MI0W	
R305 306 307 405 406 407 505 506 507	RC3DI0221IN-1	RCF 220R0 OHM +5% 250MI0W	
R344 444 544	RC3DI0223IN-8	RCF 22K0 OHM +5% 250MI0W	
R327 337 427 437 527 537	RC3DI022AIN-2	RCF 2R2 OHM +5% 250MI0W	
R330 430 530	RC3DI0271IN-8	RCF 270R0 OHM +5% 250MI0W	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
R301 401 501	RC3DI0331IN-5	RCF 330R0 OHM +5% 250MI0W	
R302 402 502	RC3DI0333IN-1	RCF 33K0 OHM +5% 250MI0W	
R342 442 542 602 603 604	RC3DI0393IN-5	RCF 39K0 OHM +5% 250MI0W	
R304 404 504	RC3DI0433IN-8	RCF 43K0 OHM +5% 250MI0W	
R308 408 508	RC3DI0471IN-0	RCF 470R0 OHM +5% 250MI0W	
R311 314 315 316 317 318 411 414 415 416 417 418 511 514 515 516 517 518	RC3DI0561IN-A	RCF 560R0 OHM +5% 250MI0W	
R334 434 534	RC3DI0820IN-1	RCF 82R0 OHM +5% 250MI0W	
R343 443 543	RC3EG0100LN-4	RCF 10R0 OHM +5% 500MI0W	
R312 412 512	RM1DI0333IN-4	RMF 33K0 OHM +1% 250MI0W	
R313 413 513	RM1DI1451IN-4	RMF 1K45 OHM +1% 250MI0W	
R303 325 333 403 425 433 503 525 533	H01-RM3EG0100LN-A	RMF 10R0 OHM +5% 500MI0W	
	3SA-3072US-SRAR-1-6	**AC ESABD IAR SURROUND BD RADIAL AVR630**	
C307 407 507	CCDIC0030NE-3	CC 3P0F +0P25F -0P25F 50.0V NP0	
C309 409 509	CCKIC0181NA-0	CC 180P0F +10% -10% 50.0V Y5P	
C304 306 404 406 504 506	CCKIC0271NA-A	CC 270P0F +10% -10% 50.0V Y5P	
C331 431 531	CCKIC0332NA-5	CC 3N3F +10% -10% 50.0V Y5P	
C320 420 520	CCKIC0472NA-0	CC 4N7F +10% -10% 50.0V Y5P	
C308 408 508	CEHEC0227NN-A	CE 220U0F +20% 10.0V 85C	
C305 405 505	CEHGC0107NN-6	CE 100U0F +20% 25.0V 6.3X1185C	
C303 311 312 403 411 412 503 511 512 601	CEHIC0106NN-5	CE 10U0F +20% 50.0V 85C	
C313 314 413 414 513 514	CFIJC0104NN-7	CPM 100N0F +10% 63.0V	
C310 410 510	CFLJC0683NN-7	CPM 68N0F +5% 63.0V	
Q305 405 505	H01-TR2SA1145NA-2	TR-SLPLF 2SA1145Y TO-92MOD P -50MI0A -150V	
Q308 311 315 408 411 415 508 511 515	H01-TRKTA1024NA-7	TR-SLPLF KTA1024 Y P 50MI0A -150V	
Q306 406 506 601	H01-TRKTA1268NA-4	TR-SHPLF KTA1268BL P 100MI0A 120V	
Q304 404 504	H01-TRKTC3198NA-3	TR-SLPLF KTC3198BL N 150MI0A	
Q301 302 303 307 320 401 402 403 407 420 501 502 503 507 520	H01-TRKTC3200NA-9	TR-SHPLF KTC3200BL N 100MI0A 120V	
Q309 312 313 409 412 413 509 512 513	H01-TRKTC3206NA-A	TR-SLPLF KTC3206 Y N 50MI0A 150V	
G601 602 603 604 605	H01-ZNMSA4004SN-4	TERMLUG GND	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3072US-SUMI-1-1	**AC EMBD IMA SUPPLY BD AVR630**	
	PBC11KSUI20-7	AVR630 SUPPLY SINGLE PCB 163MM*330MM FR-1	BK
	PBD02KSUI20-0	AVR630EU SUPPLY SINGLE PCB 163MM*330MM FR-1	IB
C118	CCMOC0472NF-9	CC 4N7F +20% -20% 250.0V Y5V	
C201 202	H01-CEHJA0109NN-0	CE 10MI0F +20% 63.0V 85C	
C103	CEHJA0477MN-9	CE 470U0F +20% 63.0V 85C	
D201	H01-DRBU10040BA-6	D-BRDLC BRIDGE BU10-04	
F101	H01-FUGF212A0XX-3	FUSULSLWBL 12.0 A 250.0 V	BK
F101	H01-FUGF26A30XX-9	FUSVDETIMELG 6.3A 250.0 V 5X20	IB
F1	H01-FUGF23000XX-A	FUSULSLWBL 3A 250.0 V	BK
F1	H01-FUGF202A0XX-4	FUSVDETIMELG 2.0A 250.0 V 5X20	IB
IC11	H01-ICKIA7805I2-7	IC-REGPOSFXD KIA7805API NORMAL TO-220IS	
R101	H01-RA4EG0335LN-9	RA 3M3 OHM +10% 500MI0W	BK
SK11	H01-RLL1227111K-1	RELAYPWR 12.0V 270.0OHM 10.0A	
R104	RM3GC0390CN-8	RMOF 39R0 OHM +5% 2.0W	
NS21	H01-SOPA21275BK-3	CONN-SPE AC OUTLET 2P 110V FE 12.75MM 2 BK 0 0	BK
NS21	H01-SOPA20019BK-A	CONN-SPE AC OUTLET 2P 220V FE 19MM2 BK 0 0	IB
NJ70	H01-SORA1JE01NN-0	JACK RCA 1P JE010003MN GND OR	
NJ79	H01-SOTOR179LBA-0	D-LEM TORX-179L	
TP11	H01-TXPWMS630A0-6	TF-LAM ST/BY-TRANSFORMER AVR630 120V	BK
TP11	H01-TXPWMSD02A0-1	TF-LAM ST/BY-TRANSFORMER AVR630EU 230V	IB
W700	H01-WG01S083000-8	WIRECONASY UNIQUE 1P 300MM UL1007 PVC DISCRETE 22 2	
N209	H01-WG02SE81500-3	WIRECONASY DL 3.96MM 2P 150MM UL1007 RIBBOM 16 1	
N202	H01-WG03SE81700-4	WIRECONASY DL 3.96MM 3P 170MM UL1007 RIBBON 16 1	
N203	H01-WG04SE82400-7	WIRECONASY DL 3.96MM 4P 240MM UL1007 RIBBON 16 1	
P207 208	H01-WN02SE00000-6	CON 3.96MM PITCH HEADER 2 POS MOLEX 35328-0210	
P201	H01-WN04SE00000-0	CON 3.96MM PITCH MOLEX 35313-0410	
P206	H01-WN07SD00000-3	CNT PLUG ST 2.5mm 7P 5267-07A	
N700	H01-WS5267605CN-A	CNT ASSY 2.0MM 5P 760MM SHIELD 26AWG UL1007	
	XY0P523K000-A	WIRE,IRON,D=0.5MM,N.W=23KG @KG	
	XY30155G00-0	TCE,CLEANER,-301#,V=55GALL0N,TYPELESS @GALLON	
	XY6R301K000-0	BAR,TIN,63/37,N.W=1.0KG @KG	
	XYALC01G000-2	ALCOHOL V=1.0GALLON @GALLON	
	XYGLU00K5RD-7	GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG	
	XYRF801G000-7	FLUX #RF-800 V=1.0 GALLON @ GALLON	
HK11	H01-ZMC12HS0100-3	AC HEATSINK 17*15*30 AVR520 -- ME	
BK70	H01-ZMC12S17A00-0	AC PUN SHIELD DIGITAL ET	
060	ZSTBM3010BB-5	SCREW ST BH 3X10	
	XY0N211N5WH-4	CABLE TIE W=0.2MM L=11.5CM WHITE @ STRIP	
	XY0N618M3SW-A	GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL	
	XY0P801K000-A	WIRE TIN D=0.8MM N.W=1.0KG @KG	
	XY1N209M0DW-4	GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL	
	XY1N218M3SW-4	GLUE FURROW W=12MML=18.3M SS WHITE @ROLL	
	XY1P202K000-1	WIRE, TIN, D=1.2MM N.W=2.0KG @KG	
	XY4N836M5CL-9	GLUE TRANSPARENT W=48MM L=36.5M @ROLL	
	XY57501K0YW-0	GLUE, YELLOW, N.W=1.0KG #575 @KG	
	XY74601K0WH-9	OINTMENT HTC #SDL-746 NW=1.0KG WHITE @KG	
	XYWAX10K000-6	ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG	
	3SA-3072US-SUAA-1-A	**AC ESABD IAA SUPPLY BD AXIAL AVR630**	
C101 108 109 113 114	CCZID0104NA-2	CC 100N0F +80% -20% 50.0V F	
D111 114	H01-DG1N04148NB-4	D-SLP 1N4148 100.0V 150E-3A	
D101 102 104 105 106 107 110 112 301	H01-DR1N04004NA-1	D-SR 1N4004 400.0V 1.0A	
D113	H01-DZ1N05231NB-1	D-ZENER 1N5231B 5.1V 500MI0W	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
D109	H01-DZ1N5239BNB-A	D-ZENER 1N5239B 9.1V 500MI0W	
D115 116	H01-DZMTZJ22BNB-8	DIODE RECT MTZ J 22B 22V 0.5W	
R109 114 301	RC3DI0102IN-9	RCF 1K0 OHM +5% 250MI0W	
R105 111	RC3DI0103IN-7	RCF 10K0 OHM +5% 250MI0W	
R110	RC3DI0104IN-5	RCF 100K0 OHM +5% 250MI0W	
R1	RC3DI0153IN-3	RCF 15K0 OHM +5% 250MI0W	
R107	RC3DI0272IN-6	RCF 2K7 OHM +5% 250MI0W	
R102 103	RC3DI047AIN-1	RCF 4R7 OHM +5% 250MI0W	
R106	RC3DI0562IN-8	RCF 5K6 OHM +5% 250MI0W	
	3SA-3072US-SUAR-1-1	**AC ESABD IAR SUPPLY BD RADIAL AVR630**	
C105 106 107 110	CCKIC0103NA-9	CC 10N0F +10% -10% 50.0V Y5P	
C111	CEHGC0477NN-6	CE 470U0F +20% 25.0V 85C	
C112	CEHGC0687NN-6	CE 680U0F +20% 25.0V 85C	
C115 117	CEHIC0105NN-7	CE 1U0F +20% 50.0V 5X11 85C	
C116	CEHIC0106NN-5	CE 10U0F +20% 50.0V 85C	
C104	CEHIC0107NN-3	CE 100U0F +20% 50.0V 85C	
C203 204 205	CFIOC0104NN-5	CPM 100N0F +10% 250.0V	
C102	CFLJC0224NN-6	CPM 220N0F +5% 63.0V	
FH10 11 13 14	H01-SOPS1FEHDNN-9	TERMFUSEHLDR FUSE-HOLDER J4210020001X	
Q101 102	H01-TRMPSA06NNA-4	TR-SLPLF MPSA06 N 500MI0A TO-92	
G101 102	H01-ZNMSA4004SN-4	TERMLUG GND	
	3SA-3072US-SUSB-1-2	**AC ESABD SMD SUPPLY BD AVR630**	
C701 702	CZZFI0104BF-8	CCCFMIC 100N0F +80% -20% 16.0V Y5V	
L701 702	H01-FB2K52012NN-5	FBEAD SURFACE MT 2500OHM FCM2012H-252T02	
R701	RS3AD0102NA-3	RMGCFMIC 1K0 OHM +5% 62MI5W	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3072US-VDMI-1-3	**AC EMBD IMA VIDEO BD AVR630**	
	PBC11KVDI20-2	AVR630 VIDEO SINGLE PCB 197MM*247MM FR-1	
For below rework	CCZID0104NA-2	CC 100N0F +80% -20% 50.0V F	
C152 199	CEHEC0227NN-A	CE 220U0F +20% 10.0V 85C	
C121	CEHFC0106NN-4	CE 10U0F +20% 16.0V 85C 5X11	
C117	CEHFC0476NN-4	CE 47U0F +20% 16.0V 85C	
L101	H01-FB05B3580NN-1	BEAD AXIAL/TAP,HC3580 80.5ohm	
IC18	H01-ICKIA7806I2-9	IC KIA7806AP VOLTQAGE REGULATOR TO-220AB	
IC40 51 52	H01-ICPC17T10B1-2	IC PHOTOCOUPLER PC-17T1 DIP4 KODENSHI	
Y100	H01-OSXBE14M3AU-7	CRYSTAL 14.31818MHz WOOIN	
Y101	H01-OSXBE17M7AU-9	CRYSTAL 17.734475MHz WOOIN	
SK11 12	H01-RLL0517811A-A	RELAY D3009(1-1462033-4)	
NJ51 52 53	H01-SOJW2350SNN-A	JACK PHONE 3.6 EP-1401A 1P BK	
NJ50	SOPA96063NN-0	JACK D-SUB 9P 87204-6063 W/DUST COVER BK	
NJ92 93 94 95 96 97 98	H01-SORA11Y00NN-5	JACK RCA+S VIDEO C5016031DN	
NJ91	H01-SORA90GNDNN-8	JACK RCA 9P JB090148TN GNDCAP RDX3,BUX3,GNX3	
NJ81	H01-SOSS9CKX3NN-9	JACK PHONE 6.35 H70980110S 9P BK	
W101	H01-WC1160705C1-9	WCL 070-05-05 UL1007 HOOK-UP 16 70MM BK 5 5	
P605	H01-WN06AB00000-0	CONN 2.0MM 6 MA R NAT GT201-6P-LS	
P500	H01-WN06SB00000-8	CONN 2.0MM 6 MA ST NAT GT201-6P-TS	
P604	H01-WN06SB01000-9	CNT PLUG BD'BD PLUG 2.0mm 35336-0610 6P	
N902	H01-WN17AB00000-4	CONN 2.0MM 17 MA R NAT SOCKET MOLEX 35237-1710 0 0	
P901	H01-WN17SB00000-1	CONN 2.0MM 17 MA ST NAT MOLEX 35336-1710 0 0	
N602	H01-WN19AB00000-9	CONN 2.0MM 19 MA R NAT SOCKET MOLEX 35237-1910 0 0	
P601	H01-WN19AI00000-2	CONN 1.25MM 19 FE ANG WH GF120-19S-LS 2794 A6	
P602 603	H01-WN19SB00000-6	CONN 2.0MM 19 MA ST NAT MOLEX 35336-1910 0 0	
N800	H01-WS4265913FN-5	CNT ASSY 2.0MM 4P 590MM SHIELD 26AWG UL2547 1/3	
	XY0N618M3SW-A	GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL	
	XY0P523K000-A	WIRE,IRON,D=0.5MM,N.W=23KG @KG	
	XY0P801K000-A	WIRE TIN D=0.8MM N.W=1.0KG @KG	
	XY1N209M0DW-4	GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL	
	XY1N218M3SW-4	GLUE FURROW W=12MML=18.3M SS WHITE @ROLL	
	XY1P202K000-1	WIRE, TIN, D=1.2MM N.W=2.0KG @KG	
	XY30155G00-0	TCE,CLEANER,-301#,V=55GALL0N,TYPELESS @GALLON	
	XY4N836M5CL-9	GLUE TRANSPARENT W=48MM L=36.5M @ROLL	
	XY6R301K000-0	BAR,TIN,63/37,N.W=1.0KG @KG	
	XYALC01G000-2	ALCOHOL V=1.0GALLON @GALLON	
	XYGLU00K5RD-7	GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG	
	XYRF801G000-7	FLUX #RF-800 V=1.0 GALLON @ GALLON	
	XYWAX10K000-6	ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG	
BK50	H01-ZMC12S16A00-A	BKT GROUND	
	3SA-3072US-VDAA-1-1	**AC ESABD IAA VIDEO BD AXIAL AVR630**	
D102 104 400	H01-DG1N04148NB-4	D-SLP 1N4148 100.0V 150E-3A	
D108	H01-DZ1N5239BNB-A	D-ZENER 1N5239B 9.1V 500MI0W	
L100 102 109	H01-FB05B3580NN-1	BEAD AXIAL/TAP,HC3580 80.5ohm	
L104 105 106 108 110 801	H01-LAINB0470CR-2	LF 47U0H +10% 5.8 OHM 500MI0A	
L107	H01-LAINB056ACR-0	LF 5U60H +10% 5.8 OHM 500MI0A	
R131 132 133 134 135 161 162 163	RC3DI0102IN-9	RCF 1K0 OHM +5% 250MI0W	
R160	RC3DI0103IN-7	RCF 10K0 OHM +5% 250MI0W	
R204	RC3DI0121IN-5	RCF 120R0 OHM +5% 250MI0W	
R801 802	RC3DI022AIN-2	RCF 2R2 OHM +5% 250MI0W	
R203 407	RC3DI0471IN-0	RCF 470R0 OHM +5% 250MI0W	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3072US-VDAR-1-3	**AC ESABD IAR VIDEO BD RADIAL AVR630**	
C142 143 171 174	CCJIC0390NE-2	CC 39P0F +5% -5% 50.0V NP0	
C183	CCKIC0103NA-9	CC 10N0F +10% -10% 50.0V Y5P	
C202	CCKIC0223NN-6	CC 22N0F +10% -10% 50.0V Z5R	
C501	CEHDC0107NN-5	CE 100U0F +20% 6.3V 85C 5X11	
C172 186 196	CEHEC0107NN-9	CE 100U0F +20% 10.0V 5X11 85C	
C100 102 103 105 106 108 109 111 136 138 139 140 203 205 289 295	CEHEC0227NN-A	CE 220U0F +20% 10.0V 85C	
C130 131 132 133 134 135 145 146 147 149	CEHEC0477MN-A	CE 470U0F +20% 10.0V 6.3X11 85C	
C901 902 903 904 905 906 907 908	CEHFC0106MN-5	CE 10U0F 16.0V 5X11 P2.5MM	
C101 104 107 110 116 122 137 204 206 213	CEHFC0106NN-4	CE 10U0F +20% 16.0V 85C 5X11	
C909 910	CEHFC0107MN-3	CAP ELEC 100U0F 16.0V M 5X11 P2.5MM	
C151 188 190 192 194 291 293	CEHFC0107NN-2	CE 100U0F +20% 16.0V 85C	
C115 141 153 161 313	CEHFC0476NN-4	CE 47U0F +20% 16.0V 85C	
C128 164 167 169	CEHIC0105NN-7	CE 1U0F +20% 50.0V 5X11 85C	
C185 198	CEHIC0106NN-5	CE 10U0F +20% 50.0V 85C	
C184 201	CEHIC02255N-0	CE 2U2F +20% 50.0V 85C 5X11	
C176	CEHIC0474NN-9	CE 470N0F +20% 50.0V 85C 5X11	
C503 504 505 506 507	CEHKC0105MN-5	CE 1U0F +20% 100.0V 85C	
C165	H01-CEMIC0334AH-4	CAP ELEC 0.33UF M 5X11 SHL SAMYOUNG	
C144	CPIIC0223NN-4	CPF 22N0F +10% 50.0V	
C168	CPIIC0682NN-5	CPF 6N8F +10% 50.0V	
Q101 104 111	H01-TR2SA933ANW-2	TR-SLPLF 2SA933ASR P -3.0A -20V	
Q100 112 114	H01-TR2SC1740NW-9	TR-SLPLF 2SC1740S R N 150MI0A 50V	
Q107 110	H01-TRDTC114YNW-6	TR-SLPLF DTC114YSA N 100MI0A	
Q400 501 502	H01-TRKTA107MNA-7	TR-SLPSWA KRA107M P	
	3SA-3072US-VDST-1-A	**AC ESABD SMD VIDEO BD AVR630**	
C163	CZEII0100BE-0	CCCFMIC 10P0F +0P5F -0P5F 50.0V NP0	
C112 113 114 118 119 120 125 126 155 156 157 158 159 160 178 180 207 921 922 923 924 925 926 927 928	CZJII0101BE-2	CCCFMIC 100P0F +5% -5% 50.0V NP0	
C123	CZJII0181BE-0	CCCFMIC 180P0F +5% -5% 50.0V NP0	
C175	CZJII0270BE-1	CCCFMIC 27P0F +5% -5% 50.0V NP0	
C177	CZJII0330BE-9	CCCFMIC 33P0F +5% -5% 50.0V NP0	
C124 200	CZJII0331BE-7	CCCFMIC 330P0F +5% -5% 50.0V NP0	
C173 181 187 197	CZKII0103BC-5	CCCFMIC 10N0F +10% -10% 50.0V X7R	
C170	CZKII0561BC-8	CCCFMIC 560P0F +10% -10% 50.0V X7R	
C148 150 154 162 189 191 193 195 248 292 294 311 401 502 508 509 801 804 911 912 913 914 915 916 917 918	CZZFI0104BF-8	CCCFMIC 100N0F +80% -20% 16.0V Y5V	
D101 106 107 109 110 501 502 503 504 505 506 507 801 802	H01-DS1S50094NB-A	D-SLP 1SS355 35.0V 225MI0A	
L501 502 503 504	H01-FB2K52012NN-5	FBEAD SURFACE MT 2500OHM FCM2012H-252T02	
IC16	H01-ICBU4053BB4-7	IC BU4053BCF SOP16 ANALOG MPX/DEMPX	
IC19 20	H01-ICBU4094BD3-2	IC CMOS BU4094BF SOP16	
IC22	H01-ICLC74763I4-1	IC OSD LC74763M SOP30	
IC901 902 903 904	H01-ICLM02068D2-A	IC-OPERAMP NJM2068M DUAL SOP8	
IC14 25 26	H01-ICMM1501XDL-A	IC-VIDEO SW MM1501XNRE SOT-26B	
IC13 15 23	H01-ICMM1505XDL-3	IC-VIDEOPROC MM1505XNRE AMPLIFIER&DRIVER	
IC27	H01-ICMM1511XDL-8	IC-VIDEO SW MM1511XNRE SOT-26B	
IC10 11 12	H01-ICNJM2296D3-7	IC-LINEAR NJM2296	
IC17	H01-ICTSH95IDB4-6	IC-VIDEOPROC TSH95ID VIDEO AMPLIFIER	
IC50	H01-ICUPD4721D8-3	IC-SPECFUNC UPD4721 DRIVERS/RECEIVERS CMOS RS-232C	
R137	RS1AD1620NA-3	RMGCFMIC 162R0 OHM +1% 62MI5W	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
J101 104 105 106 108 125 126 128 132 135 138 139 234 257 308 309 310 315 316 317 911 912 913 914 915 916 R157 158 170 184 921 922 923 924 925 926 927 928	RS3AD0000NA-0	RMGCFMIC 0 OHM +0% 62MI5W	
R190	RS3AD0101NA-5	RMGCFMIC 100R0 OHM +5% 62MI5W	
R130 148 149 176 183	RS3AD0102NA-3	RMGCFMIC 1K0 OHM +5% 62MI5W	
R112 113 114 118 119 120 124 125 126 142 143 144 145 159 165 175 188 199 206 207 208	RS3AD0103NA-1	RMGCFMIC 10K0 OHM +5% 62MI5W	
R510 941 942 943 944 945 946 947 948	RS3AD0104NA-A	RMGCFMIC 100K0 OHM +5% 62MI5W	
R153 155	RS3AD0105NA-8	RES CHIP 1M 1/16W +-5% 0603	
R150 154 156	RS3AD0121NA-A	RMGCFMIC 120R0 OHM +5% 62MI5W	
R146 147	RS3AD0123NA-6	RMGCFMIC 12K0 OHM +5% 62MI5W	
R186	RS3AD0124NA-4	RMGCFMIC 120K0 OHM +5% 62MI5W	
R931 932 933 934 935 936 937 938	RS3AD0151NA-1	RMGCFMIC 150R0 OHM +5% 62MI5W	
R152 202	RS3AD0152NA-A	RMGCFMIC 1K5 OHM +5% 62MI5W	
R171 198	RS3AD0154NA-6	RMGCFMIC 150K0 OHM +5% 62MI5W	
R167 173	RS3AD0222NA-4	RMGCFMIC 2K2 OHM +5% 62MI5W	
R139 140 141	RS3AD0223NA-2	RMGCFMIC 22K0 OHM +5% 62MI5W	
R187	RS3AD0224NA-0	RMGCFMIC 220K0 OHM +5% 62MI5W	
R192	RS3AD0243NA-7	RMGCFMIC 24K0 OHM +5% 62MI5W	
R200 511	RS3AD0271NA-2	RMGCFMIC 270R0 OHM +5% 62MI5W	
R193	RS3AD0272NA-0	RMGCFMIC 2K7 OHM +5% 62MI5W	
R177	RS3AD0330NA-1	RMGCFMIC 33R0 OHM +5% 62MI5W	
R136 138 178 181	RS3AD0331NA-A	RMGCFMIC 330R0 OHM +5% 62MI5W	
R166 172	RS3AD0333NA-6	RMGCFMIC 33K0 OHM +5% 62MI5W	
R189 406 504	RS3AD0392NA-1	RMGCFMIC 3K9 OHM +5% 62MI5W	
R201	RS3AD0430NA-8	RMGCFMIC 43R0 OHM +5% 62MI5W	
R508 512	RS3AD0470NA-7	RMGCFMIC 47R0 OHM +5% 62MI5W	
R503	RS3AD0471NA-5	RMGCFMIC 470R0 OHM +5% 62MI5W	
R501 502	RS3AD0472NA-3	RMGCFMIC 4K7 OHM +5% 62MI5W	
R405 509 513	RS3AD0473NA-1	RMGCFMIC 47K0 OHM +5% 62MI5W	
R180	RS3AD0511NA-8	RMGCFMIC 510R0 OHM +5% 62MI5W	
R197	RS3AD0513NA-4	RMGCFMIC 51K0 OHM +5% 62MI5W	
R101 104 107 110 116 122 127 128 129 168 174	RS3AD0680NA-7	RMGCFMIC 68R0 OHM +5% 62MI5W	
R151	RS3AD0682NA-3	RMGCFMIC 6K8 OHM +5% 62MI5W	
R100 102 103 105 106 108 109 111 115 117 121 123 182	RS3AD0750NA-1	RMGCFMIC 75R0 OHM +5% 62MI5W	
R185	RS3AD0820NA-6	RMGCFMIC 82R0 OHM +5% 62MI5W	
R169	RS3AD0822NA-2	RMGCFMIC 8K2 OHM +5% 62MI5W	
Q102 103	H01-TRDTA114YNI-9	TR-SSD DTA114YKA P 10K0 OHM 47K0 OHM	
Q105 106 113	H01-TRDTC114YNI-5	TR-SSD DTC114YKA N 10K0 OHM 47K0 OHM	

AVR-430 PART LIST

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3071US-BC00-1-6	AC MECH BOM AVR430 HARMAN OEM	
	H01-FBB0102AA00-7	FCORE FERRIT MAGNET SRH9. 9X20. 0X5. 1+CASE W5	
	H01-SWA2B21PDA&-7	SW PUSH POWER SDDLB15700	
	H01-TXPWMM430B0-8	MN X'FORMER AVR430 120V	BK
	H01-TXPWMMD01B0-8	MN X'FORMER AVR430EU 230V	IB
	H01-WF19N2605FU-9	FFC-JUMPER 19X 1.25MM 260MM	
	H01-WF23N2705FU-A	FFC-JUMPER 23X 1.25MM 270MM	
	H01-WF4261805BN-1	WIRECONASY DL 2.0MM 4P 180MM UL 1007 RIBBON 26 1	
	H01-WF9262205BN-3	WIRECONASY DL 2.0MM 9P 220MM UL 1007 RIBBON 26 1	
	H01-WG03SE85300-0	WIRECONASY DL 3.96MM 2P 530MM UL1007 RIBBON 16 1	
	XY1N033M0DW-3	DOUBLE SIDE TAPE #Y-4615 (3M)	
	XY1N209M0DW-4	GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL	
	XY1N218M3SW-4	GLUE FURROW W=12MML=18.3M SS WHITE @ROLL	
	XY1N250M0CL-5	GLUE,TRANSPARENT,CANDY STRIP,W=12MM,L=50M @M	
	XY1N250M0DW-4	GLUE,TAPE,#9070,W=12MM,L=50,DOUBLE-SIDE,WHITE. @METER	
	XY2N450M0DW-6	GLUE,TAPE,#9070,W=24MM,L=50,DOUBLE-SIDE,WHITE. @METER	
	XY501110CRD-2	GLUE, RED #AK-501 F/SCREW V=110CC @BOTTL	
	XYALC01G000-2	ALCOHOL V=1.0GALLON @GALLON	
	XYEM501K000-2	SPECIALTY LUBRICANTS GREASE,#EM-50L,W=1KG @G	
	XYGLAA5K200-3	GLASS CLEANER,N.W=0.52KG @BOTTL	
	XYKIFA4L500-1	KIF VEG LIQUID CAR WAX,V=0.445 L @BOTTLE	
	XYVAS00K500-6	VASOGEN,YELLOW,N.W=0.5KG @BOTTL	
	ZFNR12062SB-8	RUBBER SIDE	
	ZFNR12072SB-5	RUBBER SIDE	
	ZFNR13830SB-6	RUBBER SIDE	
	ZFNR19720SB-5	RUBBER FOOT 19.7X19.7X2T BK	
	ZKC1030HA00-6	LABEL SERIAL AVR430	BK
	ZKD0130HA00-A	LABEL SERIAL AVR430 EU	IB
	ZKC1073HA00-7	LABEL BARCODE AVR430	BK
	ZKD0173HA00-0	LABEL BARCODE AVR430 EU	IB
	ZKC1095HA00-0	LABEL LICENSE AVR430	
	ZKC1222HA00-2	LABEL RISK	
	ZKC1229HA00-7	LABEL DATE	
	ZKC1281HA00-9	LABEL QC CHECK	
	ZKGEN29HA00-8	LABEL DATE BLANK	
	ZKGEN30HA00-6	LABEL SERIAL BLANK	
	ZKGEN73HA00-7	LABEL BARCODE BLANK	
	ZKGEN97HA00-3	LABEL MAIN POWER REMIND	
	H01-ZMB01S00100-5	BKT HEADPHONE JACK	
	H01-ZMB01S02200-9	SPRING PLATE GND C5212 0.2T	
	H01-ZMC10HS0100-7	H/SINK AMP AVR430	
	H01-ZMC10S01A00-0	PANEL REAR AVR430	BK
	H01-ZMD01S01A00-8	PANEL REAR AVR430 EU	IB
	H01-ZMC11HS0200-7	H/SINK MAIN AVR630	
	H01-ZMC11S00200-0	AL DOOR AVR430/630	
	H01-ZMC11S00300-2	AL PANEL AVR430/630	
	H01-ZMC11S04A00-1	BKT HINGE AVR430/630 LEFT	
	H01-ZMC11S04B00-3	BKT FRAME GUIDE	
	H01-ZMC11S05B00-4	BKT HINGE AVR430/630 RIGHT	
	H01-ZMC11S06A00-3	SPRING STOPPER AVR430/630	
	H01-ZMC11S07A00-4	CHASSIS FRONT AVR430/630	
	H01-ZMC11S08A00-5	COVER TOP AVR430/630	
	H01-ZMC11S09A00-6	BKT FAN FRONT AVR430/630	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	H01-ZMC11S10A00-6	BKT FAN REAR AVR430/630	
	H01-ZMC11S12A00-8	CAP BUTTON STAND-BY AVR430/630	
	H01-ZMC11S13A00-9	CHASSIS MAIN AVR430/630	
	H01-ZMC11S14A00-A	BRACKET DOOR	
	H01-ZMC12S07A00-2	COVER BOTTOM	
	H01-ZMC12S08B00-5	BKT TRANS BOTTOM	
	H01-ZMC12S09A00-4	BKT HEATSINK	
	ZMC12S13AYE-1	STANDOFF HEX M4X0.7 6X31.9H	
	ZMC12S14AYE-9	STANDOFF HEX M4X0.7 6X61.9H	
	ZMC12S15AYE-6	STANDOFF HEX M4X0.7 6X111.2H	
	H01-ZMC12S19A00-2	BKT AC INLET	
	H01-ZMC12S20A00-2	BADGE AL HARMAN/KARDON SILVER	
	H01-ZMGEN00GAGY-0	AL LOGO BADGE TOP	
	ZNSSM4045HZ-4	NUT M4 HEXAGON CIRCULAR EXTERNAL	
	ZPC1001GBGY-0	PANEL FRONT AVR430	BK
	ZPD0101GBGY-4	PANEL FRONT AVR430EU	IB
	ZPC1002GAGY-9	DOOR AVR430/630	
	ZPC1003GAGY-5	BUTTON POWER	
	H01-ZPC1004GASG-0	BUTTON 7 KEY	BK
	H01-ZPD0104GASG-8	BUTTON 7 KEY EU	IB
	ZPC1005GAGY-8	BUTTON 8 KEY	
	ZPC1006GAWH-0	BUTTON STANDBY	
	ZPC1007GAMW-9	INDICATOR STAND-BY	
	ZPC1016GAMW-8	KNOB VOLUME AVR630	
	ZPC1017GABK-6	HOLDER VFD AVR430/630	
	H01-ZPC1018GART-7	FILTER VFD	
	H01-ZPC1020GACR-2	CAP KNOB VOLUME AVR630	
	H01-ZPC1021GASG-4	COVER KNOB VOLUME AVR430/630	
	H01-ZPC1022GABT-3	WINDOW DISPLAY AVR430	
	ZPC1103GAGY-A	FOOT 50MM 15.8MM	
	ZSMCM4008BY-1	SCREW BM 4X8	
	ZSMCM4010BB-5	SCREW BM 4X10	
	ZSTBM3008BY-1	SCREW ST BH 3X8	
	ZSTBM3010BB-5	SCREW ST BH 3X10	
	ZSTBM3012BY-A	SCREW ST BH 3X12 PIVOT	
	ZSTGM3010BB-3	SCREW ST BH 3X10 GROUND	
	ZSTWM3006BB-3	SCREW ST WPH 3X6	
	ZSTWM3008BY-8	SCREW ST WPH 3X8	
	ZSTWM3A08BY-6	SCREW ST W7.5PH 3X8	
	ZSTWM4008BC-3	SCREW ST WPH 4X8 SILVER CHROM	
	ZTB017030AA-4	CABLE TIE 100MM NYLON 6	
	ZUC1201AABK-7	SPONGE 30X30X10T BK	
	ZV4P00030TH-3	HEAT SHRINK TUBE L30MM*D4.0MM*T0.5MM	
	H01-ZVC11DWT100-3	TAPE DOOR	
	H01-ZVC11DWT200-5	TAPE PANEL	
	H01-ZVC11FAN100-6	FAN JF0925S1L	
	ZVC11FILM0A-A	PROTECTION FILM	
	ZVC11FLT100-9	FELT COVER PANEL	
	ZVC11FLT200-7	FELT COVER KNOB	
	H01-ZVC11GEAR01-A	DAMPER GEAR DP120	
	H01-ZVC11TUNE01-7	TUNER MODULE KST-MB011MW0-81 US	BK
	H01-ZVD01TUNE00-2	TUNER MODULE KST-MB114MW1-81 OEM EU	IB
	ZWF793008PO-5	WASHER FIBER 3 0.8T	
	ZWM623108SZ-2	WASHER SPRING 3	
	ZWM763109SZ-2	AC SPRING WASHER RT2250(PAV5005)	
	ZWM803305PZ-1	WASHER PLAIN 3	
	ZWMC04810PZ-5	WASHER PLAIN 4	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3071US-DGMI-1-5	**AC EMBD IMA DSP BD AVR430**	
	PBC11KDGB21-0	AVR630 DSP DUAL PCB 209MM*170MM	
C657	CEZXA0479MN-5	CM 47MI0F +80% -20% 5.5V 70C	
REWORK TO C719	CZKII0103BC-5	CCCFMIC 10N0F +10% -10% 50.0V X7R	
IC601	H01-ICKA78R08I2-4	IC-KA78R08API TO-220IS-4PIN	
T701	H01-LF11030A2NA-4	TFPULSE TRANSFORMER 110UH FP-110 FERRIT MAGNET	
Y800	H01-OSCEM24M5RU-A	VCXO 24M576 HZ +50 PPM -50 PPM 0 OHM 3.3V	
Y600	H01-OSCNI20MOCU-6	CSTLS20MOX51-B0	
	RC3DI022AIN-2	RCF 2R2 OHM +5% 250MI0W	
	RC3DI033AIN-6	RCF 3R3 OHM +5% 250MI0W	
NJ4	H01-SORA103LNNN-5	CON PHONO SCKT RCA 1P W/GND JE010003LN OG	
NJ5	H01-SORA21502NN-2	CON PHONO SCKT RCA 2P W/GNDCAP JW-1502SN OO	
NJ72	H01-SORA40RSANN-6	JACK RCA 4P JB040131ZN GN BN PP TA	
NJ71	H01-SORA40RSCNN-A	JACK RCA 4P JB040131QN WH BU RD GY	
NJ74 75	H01-SOTOR179LBA-0	D-LEM TORX-179L	
NJ76	H01-SOTOT179LBA-7	D-LEM TOTX-179L	
REWORK	H01-WC1181505C1-8	WCL 150-05-05 UL1007 HOOK-UP 18 150MM BK 5 5	
REWORK	H01-WC1260405C1-1	WCL 040-05-05 UL1007 HOOK-UP 26 040MM BK 5 5	
REWORK	H01-WC1260705C1-6	WCL 070-05-05 UL1007 HOOK-UP 26 070MM BK 5 5	
REWORK	H01-WC1261155C1-0	WCL 115-05-05 UL1007 HOOK-UP 26 115MM BK 5 5	
W3~W3-1 W4~W4-1	H01-WC1261305C1-2	WCL 130-05-05 UL1007 HOOK-UP 26 130MM BK 5 5	
N405	H01-WG06SB83000-8	CNT ASSY 2.0MM 6P 300MM RIBBON 26AWG UL1007	
P1	H01-WN05SB00000-0	CONN 2.0MM 5 MA ST NAT GT201-5P-TS	
N408	H01-WN06AB00001-4	CNT PLUG BD'BD SOCKET 2.0mm 35237-0610	
P403	H01-WN09SB00000-A	CONN 2.0MM 9 MA ST NAT GT201-9P-TS	
N407	H01-WN11SB00000-8	CONN 2.0MM 11P MA ST NAT MOLEX 35336-1110 0 0	
N404	H01-WN17SB00000-1	CONN 2.0MM 17 MA ST NAT MOLEX 35336-1710 0 0	
N403	H01-WN19AB00000-9	CONN 2.0MM 19 MA R NAT SOCKET MOLEX 35237-1910 0 0	
N401	H01-WN19SB00000-6	CONN 2.0MM 19 MA ST NAT MOLEX 35336-1910 0 0	
N406	H01-WN23AI000WH-9	CONN 1.25MM 23 FE ANG WH GF120-23S-LS 2794 A6	
	XY0N618M3SW-A	GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL	
	XY0P801K000-A	WIRE TIN D=0.8MM N.W=1.0KG @KG	
	XY1N209M0DW-4	GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL	
	XY1N218M3SW-4	GLUE FURROW W=12MML=18.3M SS WHITE @ROLL	
	XY1P202K000-1	WIRE, TIN, D=1.2MM N.W=2.0KG @KG	
	XY30155G00-0	TCE,CLEANER,-301#,V=55GALL0N,TYPELESS @GALLON	
	XY4N836M5CL-9	GLUE TRANSPARENT W=48MM L=36.5M @ROLL	
	XY6R301K000-0	BAR,TIN,63/37,N.W=1.0KG @KG	
	XYALC01G000-2	ALCOHOL V=1.0GALLON @GALLON	
	XYGLU00K5RD-7	GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG	
	XYJUI00K5GY-5	JUICE TIN N=0.5KG GREY @KG	
	XYRF801G000-7	FLUX #RF-800 V=1.0 GALLON @ GALLON	
	XYWAX10K000-6	ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG	
	3SA-3071US-DGAA-1-3	**AC ESABD IAA TOP DSP BD AVR430**	
L600	H01-LAINB047ACR-3	LF 4U7H +10% 1.7 OHM 190.0A	
R619	RC3DI010AIN-1	RCF 1R0 OHM +5% 250MI0W	
	3SA-3071US-DGAR-1-5	**AC ESABD TOP IAR DSP BD AVR430**	
C472 473 474	CEHDC0108NN-3	CE 1MI0F +20% 6.3V 8X11.5 85C	
C231 232 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 456 457 458 459 460 461 462 463 613 620 621 727 729 731 733 735	CEHFC0106MN-5	CE 10U0F 16.0V 5X11 P2.5MM	
C233 470 471 618 630 723 800 807 811 820 822 828 830	CEHFC0107MN-3	CAP ELEC 100U0F 16.0V M 5X11 P2.5MM	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
C627	CEHFC0476MN-5	CE 47U0F +20% 16.0V 5X11 P2.5MM	
C619	CEHIC0104MN-A	CE 100N0F +20% 50.0V 85C SSE TYPE	
C806	CEHIC0225NN-8	CE 2U2F +20% 50.0V 85C 2.5MM	
C725	CEHIC0475NN-7	CE 4U7F +20% 50.0V 85C	
Q611	H01-TRMPSA06NNA-4	TR-SLPLF MPSA06 N 500MI0A TO-92	
	3SA-3071US-DGSB-1-6	**AC ESABD SMD BOT DSP BD AVR430**	
C606 608 611 615	CZJII0101BE-2	CCCFMIC 100P0F +5% -5% 50.0V NP0 0603	
C432 433 444 445	CZJII0471BE-2	CCCFMIC 470P0F +5% -5% 50.0V NP0	
C434 435 436 437 438 439 440 441 442 443 446 447	CZJII0561CE-0	CCCFMIN 560P0F +5% -5% 50.0V NP0 0805	
C720	CZKGI0183BC-6	CAP CHIP 18NF 25V +/-10% 0603 X7R	
C721	CZKII0102BC-7	CCCFMIC 1N0F +10% -10% 50.0V X7R 0603	
C709 711 716 997 998	CZKII0103BC-5	CCCFMIC 10N0F +10% -10% 50.0V X7R	
C416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431	CZKII0272BC-4	CCCFMIC 2N7F +10% -10% 50.0V X7R	
C116 117 612 614 617 622 624 628 705 707 708 710 715 719 722 724 726 728 730 732 734 742 801 802 808 809 810 814 815 816 818 819 821 829	CZZFI0104BF-8	CCCFMIC 100N0F +80% -20% 16.0V Y5V	
D400 401 600 601 604 651	H01-DS1S50094NB-A	D-SLP 1SS355 35.0V 225MI0A	
L1 700 701 704 803 R728 880	H01-FB2K52012NN-5	FBEAD SURFACE MT 2500OHM FCM2012H-252T02	
L707 708	H01-FB3002012NN-4	FBEAD SURFACE MT 300OHM FCM2012V-301T07	
JUM1 2 R6 7 8	RS3AD0000NA-0	RMGCFMIC 0 OHM +0% 62MI5W	
R708 731 733 734 745	RS3AD0100NA-7	RMGCFMIC 10R0 OHM +5% 62MI5W	
R632 711 730 732	RS3AD0101NA-5	RMGCFMIC 100R0 OHM +5% 62MI5W	
R631 712 713	RS3AD0102NA-3	RMGCFMIC 1K0 OHM +5% 62MI5W	
R5	RS3AD0103NA-1	RMGCFMIC 10K0 OHM +5% 62MI5W	
R448 449 450 451 452 453 454 455	RS3AD0104NA-A	RMGCFMIC 100K0 OHM +5% 62MI5W	
R416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431	RS3AD0122NA-8	RMGCFMIC 1K2 OHM +5% 62MI5W	
R657	RS3AD0200NA-3	RES,CHIP 20 OHM 1/16W +/-5% 0603	
R729 804	RS3AD0221NA-6	RMGCFMIC 220R0 OHM +5% 62MI5W	
R744 876 877 878	RS3AD0332NA-8	RMGCFMIC 3K3 OHM +5% 62MI5W	
R400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415	RS3AD0432NA-4	RMGCFMIC 4K3 OHM +5% 62MI5W	
R651 652 653	RS3AD0472NA-3	RMGCFMIC 4K7 OHM +5% 62MI5W	
R623	RS3AD0473NA-1	RMGCFMIC 47K0 OHM +5% 62MI5W	
R456 457 458 459 460 461 462 463	RS3AD0561NA-4	RMGCFMIC 560R0 OHM +5% 62MI5W	
R432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447	RS3AD0562NA-2	RMGCFMIC 5K6 OHM +5% 62MI5W	
R710	RS3AD0621NA-1	RMGCFMIC 620R0 OHM +5% 62MI5W	
R709	RS3AD0681NA-5	RMGCFMIC 680R0 OHM +5% 62MI5W	
NJ13 14	RS3AY0103NA-7	RCA 10K0 OHM +5% 62M15W 4	
NJ15 16	RS3AY0332NA-3	RCA 3K3 OHM +5% 62M15W 4	
L800 JUM5 6 7 11 12 13 14 15 16 17 18 19 20	RS3BB0000NA-5	RMGCFMIN 0 OHM +5% 100MI0W 0805	
Q600 601 604 605 606 607 608 609 612 613	H01-TRDTC114YNI-5	TR-SSD DTC114YKA N 10K0 OHM 47K0 OHM	
	3SA-3071US-DGST-1-1	**AC ESABD TOP SMD DSP BD AVR430**	
C100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 235 236 237 238 616 625 626	CZJII0101BE-2	CCCFMIC 100P0F +5% -5% 50.0V NP0 0603	
C700 702 743	CZJII0220BE-5	CCCFMIC 22P0F +5% -5% 50.0V NP0	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
C853	CZJII0221BE-3	CCCFMIC 220P0F +5% -5% 50.0V NP0	
C491 492 493 494	CZJII0470BE-4	CCCFMIC 47P0F +5% -5% 50.0V NPO 0603	
C851	CZJII0471BE-2	CCCFMIC 470P0F +5% -5% 50.0V NP0	
C243 244	CZKII0102BC-7	CCCFMIC 1N0F +10% -10% 50.0V X7R 0603	
C703 706 717	CZKII0103BC-5	CCCFMIC 10N0F +10% -10% 50.0V X7R	
C804	CZKII0122BC-1	CCCFMIC 1N2F +10% -10% 50.0V X7R 0603	
C805	CZKII0680BE-7	CCCFMIC 68P0F +10% -10% 50.0V NP0	
C234 239 240 241 242 448 449 450 451 452 453 454 455 629 714 718 803 891 899	CZZFI0104BF-8	CCCFMIC 100N0F +80% -20% 16.0V Y5V	
D603 605 606	H01-DS1S50094NB-A	D-SLP 1SS355 35.0V 225MI0A	
L703 802 804 805 R879	H01-FB2K52012NN-5	FBEAD SURFACE MT 2500OHM FCM2012H-252T02	
L705 R735	H01-FB3002012NN-4	FBEAD SURFACE MT 300OHM FCM2012V-301T07	
IC804	H01-IC49L8192I5-A	IC-FLASH MEMORY ROM AT49LV8192A 70ns	
IC801	H01-IC74V244MG5-3	IC-LOGIC 74VHCT244A INVERTER CMOS	
IC802	H01-IC74VC244G5-6	IC-LOGIC 74VHC244A INVERTER CMOS	
IC602	H01-ICBU4094BD3-2	IC CMOS BU4094BF SOP16	
IC700	H01-ICCS42528EC-0	IC-CODEC CS42528CQ	
IC800	H01-ICCS49400ED-3	IC-DSP CS494003-CQ LQFP144	
IC600	H01-ICD703033E1-54	IC-MICOM FLASH NEC UPD70F3033BGF 0228KK001 JAPAN QFP100	
IC805	H01-ICK4S1616M6-9	IC-SDRAM K4S161622E-TC70 OR TC80	
IC116 117 400 401 402 404	H01-ICLM02068D2-A	IC-OPERAMP NJM2068M DUAL SOP8	
IC603	H01-ICM24C04WD2-1	IC-EEPROM M24C04WMN6T	
IC701 702	H01-ICM74H04MD4-2	IC-LOGIC M74HCU04M1R INVERTER HCT	
IC803	H01-ICNJU6324D2-3	IC-SPECFUNC NJU6324M SOP8 CMOS CRYSTAL	
R717	RS3AD0000NA-0	RMGCFMIC 0 OHM +0% 62MI5W	
R600 601 602 603 604 605	RS3AD0100NA-7	RMGCFMIC 10R0 OHM +5% 62MI5W	
R715	RS3AD0101NA-5	RMGCFMIC 100R0 OHM +5% 62MI5W	
R100 101 102 103 104 106 107 606 607 608 609 610 617 618 626 627 628 629 630	RS3AD0102NA-3	RMGCFMIC 1K0 OHM +5% 62MI5W	
R238 239 240 241 242 243 611 612 616 621 624 655 656 658 659 802 868 869 871 872 873 874	RS3AD0103NA-1	RMGCFMIC 10K0 OHM +5% 62MI5W	
R654	RS3AD0103NA-1	RMGCFMIC 10K0 OHM +5% 62MI5W	BK
R614	RS3AD0103NA-1	RMGCFMIC 10K0 OHM +5% 62MI5W	IB
R622 702 706 724	RS3AD0104NA-A	RMGCFMIC 100K0 OHM +5% 62MI5W	
R244 245 246 247	RS3AD0151NA-1	RMGCFMIC 150R0 OHM +5% 62MI5W	
R234 235	RS3AD0203NA-8	RMGCFMIC 20K0 OHM +5% 62MI5W	
R746 801	RS3AD0221NA-6	RMGCFMIC 220R0 OHM +5% 62MI5W	
R725 736 738	RS3AD0222NA-4	RMGCFMIC 2K2 OHM +5% 62MI5W	
R108 109 110 111 112 114 115	RS3AD0223NA-2	RMGCFMIC 22K0 OHM +5% 62MI5W	
R901	RS3AD0270NA-4	RES,CHIP 27 OHM 1/16W +/-5% 0603	
R870	RS3AD0302NA-6	RMGCFMIC 3K0 OHM +5% 62MI5W	
R2 875	RS3AD0332NA-8	RMGCFMIC 3K3 OHM +5% 62MI5W	
R803	RS3AD0391NA-3	RMGCFMIC 390R0 OHM +5% 62MI5W	
R105 236 237 1 4 625	RS3AD0472NA-3	RMGCFMIC 4K7 OHM +5% 62MI5W	
R232 233 613 620 727 737 739	RS3AD0473NA-1	RMGCFMIC 47K0 OHM +5% 62MI5W	
R704 726 743	RS3AD0561NA-4	RMGCFMIC 560R0 OHM +5% 62MI5W	
R113	RS3AD0682NA-3	RMGCFMIC 6K8 OHM +5% 62MI5W	
R700 705 723	RS3AD0750NA-1	RMGCFMIC 75R0 OHM +5% 62MI5W	
NJ17 18 19	RS3AY0103NA-7	RCA 10K0 OHM +5% 62M15W 4	
NJ1 10 11 2 3 6 7 8 9	RS3AY0470NA-2	RCA 47R0 OHM +5% 62M15W 4	
JUM3 4 8 9 10	RS3BB0000NA-5	RMGCFMIN 0 OHM +5% 100MI0W 0805	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3071US-FCMI-1-A	**AC EMBD IMA FRONT BD AVR430**	
	PBC11KFCI21-1	AVR630 FRONT SINGLE PCB 400MM*163MM FR-1	
C131	CEHFC0476DH-4	CE 47U0F +20% 16.0V 85C	
CA11	CFMVA0104NN-2	CPPMX 100N0F +20% -20%	
D703 704 705 706 707 708 709 710	H01-DL30B2015AA-A	D-LEM 30B3-20-15 GaN SUPER BLUE WATER CLEAR 15	
D800	H01-DL3BA05V0BA-2	D-LEM BLUE/AMBER 3PIE RD RND CL	
RM100	H01-ICRPM6938NN-3	IC-REMOTE RPM6938-RSIP-A3 RECEIVER 38KHZ	
NJ80	H01-SORA3313PNN-3	CON PHONO SCKT RCA-313P 3 PINS	
NJ81	H01-SORA8OSC5N8-2	JACK S-VIDEO 1P C40160261N	
NS199	H01-SOXA27014NN-9	CON MAINS INLET A/C INLET 7014-NGP	
VR100	H01-SWE3A0505S1-9	SWIROT EC16B24204 5V 500U0A 10T 3P 0 0	
DP10	H01-VDHCA18LL03-7	FL HCA-18LL03	
W200 201	H01-WG01S083000-8	WIRECONASY UNIQUE 1P 300MM UL1007 PVC DISCRETE 22 2	
N101~P101	H01-WG03AB80900-2	WIRECONASY DL 2.0MM 03P 90MM ANG UL1007 RIBBON 26 1 B2011HR2	
N102	H01-WG04SB82200-6	WIRECONASY DL 2.0MM 04P 220MM UL1007 RIBBON 26 1	
N110	H01-WG07SD84000-4	WIRECONASY DL 2.5MM 07P 400MM UL1007 RIBBON 24 1	
P199	H01-WN02SE00000-6	CON 3.96MM PITCH HEADER 2 POS MOLEX 35328-0210	
P121	H01-WN11AB00000-0	CONN 2.0MM 11 MA R NAT SOCKET MOLEX 35237-1110 0 0	
P120	H01-WN11SB00000-8	CONN 2.0MM 11P MA ST NAT MOLEX 35336-1110 0 0	
P123	H01-WN19AB00000-9	CONN 2.0MM 19 MA R NAT SOCKET MOLEX 35237-1910 0 0	
P105	H01-WN19AI00000-2	CONN 1.25MM 19 FE ANG WH GF120-19S-LS 2794 A6	
P122	H01-WN19SB00000-6	CONN 2.0MM 19 MA ST NAT MOLEX 35336-1910 0 0	
P103	H01-WN23AI000WH-9	CONN 1.25MM 23 FE ANG WH GF120-23S-LS 2794 A6	
N107	H01-WS4264822EN-4	WIRECONASY DL 2.0MM 04P 480MM UL1533 SHIELD 26 1 2/2	
N103	H01-WS6265105EN-2	WIRECONASY DL 2.0MM 6P 510MM UL1533 SHIELD 26 1	
	XY0N211N5WH-4	CABLE TIE W=0.2MM L=11.5CM WHITE @ STRIP	
	XY0N618M3SW-A	GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL	
	XY0P523K000-A	WIRE,IRON,D=0.5MM,N.W=23KG @KG	
	XY0P801K000-A	WIRE TIN D=0.8MM N.W=1.0KG @KG	
	XY1N127N0WH-5	ADHESIVE WHITE D=1.1CM L=27CM @KG	
	XY1N209M0DW-4	GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL	
	XY1N218M3SW-4	GLUE FURROW W=12MML=18.3M SS WHITE @ROLL	
	XY1N250M0DW-4	GLUE,TAPE,#9070,W=12MM,L=50,DOUBLE-SIDE,WHITE. @METER	
	XY1P202K000-1	WIRE, TIN, D=1.2MM N.W=2.0KG @KG	
	XY30155G00-0	TCE,CLEANER,-301#,V=55GALL0N,TYPELESS @GALLON	
	XY4N836M5CL-9	GLUE TRANSPARENT W=48MM L=36.5M @ROLL	
	XY6R301K000-0	BAR,TIN,63/37,N.W=1.0KG @KG	
	XYALC01G000-2	ALCOHOL V=1.0GALLON @GALLON	
	XYGLU00K5RD-7	GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG	
	XYRF801G000-7	FLUX #RF-800 V=1.0 GALLON @ GALLON	
	XYWAX10K000-6	ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG	
	3SA-3071US-FCAA-1-8	**AC ESABD IAA FRONT BD AVR430**	
D101	H01-DG1N04148NB-4	D-SLP 1N4148 100.0V 150E-3A	
J139	H01-LAINB0470CR-2	LF 47U0H +10% 5.8 OHM 500MI0A	
L100	H01-LAINB047ACR-3	LF 4U7H +10% 1.7 OHM 190.0A	
R165 166 167	RC3DI0103IN-7	RCF 10K0 OHM +5% 250MI0W	
R802	RC3DI0221IN-1	RCF 220R0 OHM +5% 250MI0W	
R803	RC3DI0271IN-8	RCF 270R0 OHM +5% 250MI0W	
R700 701 702 703	RC3DI0331IN-5	RCF 330R0 OHM +5% 250MI0W	
	3SA-3071US-FCAR-1-A	**AC ESABD IAR FRONT BD AVR430**	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
C123	CCZID0104NA-2	CC 100N0F +80% -20% 50.0V F	
C601	CEHEC0107NN-9	CE 100U0F +20% 10.0V 5X11 85C	
C103	CEHFC0476DH-4	CE 47U0F +20% 16.0V 85C	
C129 130	CPIKC0473NN-0	CPF 47N0F +10% 100.0V	
S200 201 202 203 204 205 206 207 208 209 211 212 213 214 215 216 217 218 219 220	H01-SWC2A112FS1-8	SWITACT VERTICAL SKQNADD010 12V 50MA	
Q100 101	H01-TRMPSA56YNA-5	TR-SLPLF MPSA56 Y P -500MI0A -300V	
	3SA-3071US-FCST-1-6	**AC ESABD SMD FRONT BD AVR430**	
C111 112 113 115 116 118 119 120 121	CZJII0101BE-2	CCCFMIC 100P0F +5% -5% 50.0V NP0 0603	
C220 221	CZKII0223BC-6	CCCFMIC 22N0F +10% -10% 50.0V X7R 0603	
C100 101	CZKII0821BC-8	CCCFMIC 820P0F +10% -10% 50.0V X7R	
C102 110 122 132 200 201	CZZFI0104BF-8	CCCFMIC 100N0F +80% -20% 16.0V Y5V	
D100 102 103 104 105 200 201 202 203	H01-DS1S50094NB-A	D-SLP 1SS355 35.0V 225MI0A	
IC101	H01-ICBU4094BD3-2	IC CMOS BU4094BF SOP16	
J156 157 301 302 303 R901 902 903	RS3AD0000NA-0	RMGCFMIC 0 OHM +0% 62MI5W	
R103	RS3AD0100NA-7	RMGCFMIC 10R0 OHM +5% 62MI5W	
R161	RS3AD0101NA-5	RMGCFMIC 100R0 OHM +5% 62MI5W	
R1 110 119 120 121 136 160 162 163 164 201 211	RS3AD0102NA-3	RMGCFMIC 1K0 OHM +5% 62MI5W	
R2	RS3AD0104NA-A	RMGCFMIC 100K0 OHM +5% 62MI5W	
R202 212	RS3AD0122NA-8	RMGCFMIC 1K2 OHM +5% 62MI5W	
R203 213	RS3AD0152NA-A	RMGCFMIC 1K5 OHM +5% 62MI5W	
R209 219	RS3AD0183NA-A	RMGCFMIC 18K0 OHM +5% 62MI5W	
R109 134	RS3AD0221NA-6	RMGCFMIC 220R0 OHM +5% 62MI5W	
R204 214	RS3AD0222NA-4	RMGCFMIC 2K2 OHM +5% 62MI5W	
R205 215	RS3AD0272NA-0	RMGCFMIC 2K7 OHM +5% 62MI5W	
R206 216	RS3AD0332NA-8	RMGCFMIC 3K3 OHM +5% 62MI5W	
R122	RS3AD0471NA-5	RMGCFMIC 470R0 OHM +5% 62MI5W	
R102	RS3AD0472NA-3	RMGCFMIC 4K7 OHM +5% 62MI5W	
R104	RS3AD0473NA-1	RMGCFMIC 47K0 OHM +5% 62MI5W	
R207 217	RS3AD0562NA-2	RMGCFMIC 5K6 OHM +5% 62MI5W	
R800 801	RS3AD0681NA-5	RMGCFMIC 680R0 OHM +5% 62MI5W	
R100 101	RS3AD0683NA-1	RMGCFMIC 68K0 OHM +5% 62MI5W	
R208 218	RS3AD0822NA-2	RMGCFMIC 8K2 OHM +5% 62MI5W	
Q102 103 805	H01-TRDTC114YNI-5	TR-SSD DTC114YKA N 10K0 OHM 47K0 OHM	
Q800	H01-TRKTD1304ND-5	TR-SLPSWA KTD1304 N 20V 300MI0A SOT-23	
043	XYGLU00K5RD-7	GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3071US-MAMI-1-2	**AC EMBD IMA MAIN BD AVR430**	
	PBC11KMAI20-3	AVR630 MAIN SINGLE PCB 330MM*245MM FR-1	
C515	CEHFA0228MN-3	CE 2MI2F +20% 16.0V 85C	
C514	H01-CEHFA0688MN-5	CE 6MI8F +20% 16.0V 85C 16X31.5 SHL	
C509 510	CEHHC0228MN-A	CE 2MI2F +20% 35.0V 85C	
C517	CEHIA0228MN-4	CE 2MI2F +20% 50.0V 85C	
C504 505	H01-CEHJA0129NN-2	CAP ELEC DL 12000uF 63.0V 85C	
C303 304 305 306 421 422 423 424	CEHJA0477MN-9	CE 470U0F +20% 63.0V 85C	
D501	H01-DRBU10040BA-6	D-BRDLC BRIDGE BU10-04	
D503	H01-DRBU604F0NA-9	DIODE BRIDGE BU6-04F FRONTIER	
D502 505	H01-DRW204F00BA-A	DIODE BRIDGE W2-04F FRONTIER	
IC53	H01-ICBA033T0I2-9	IC-REGPOSFXD BA033T NORMAL	
IC55	H01-ICKIA7805I2-7	IC-REGPOSFXD KIA7805API NORMAL TO-220IS	
IC59	H01-ICKIA7812I2-2	IC-REGPOSFXD KIA7812API NORMAL	
IC54	H01-ICKIA7824I2-7	IC-REGPOSFXD KIA7824API TO-220IS NORMAL	
IC56	H01-ICKIA7905I2-5	IC-REGNEGFXD KIA7905PI NORMAL	
IC22	H01-ICLM02068D2-A	IC-OPERAMP NJM2068M DUAL SOP8	
IC51	H01-ICLM07815BD-0	IC-REGPOSFXD KIA7815API NORMAL	
IC52	H01-ICLM07915BD-9	IC-REGNEGFXD KIA7915API NORMAL TO-220AB	
L301 302 401 402	H01-LCNNNA050NA-1	LFA 1MM 10MM 5 LEFT 0.0MM NONE	
R378 379 471 472	H01-RI3IC022BEN-8	RW 220MI0 OHM +5% 5.0W 100PPM/'C -100PPM/'C	
R392 393 475 476	RM3FC0100BN-7	RMOF 10R0 OHM +5% 1.0W	
R505	RM3GC0100CN-A	RMOF 10R0 OHM +5% 2.0W	
R514	RM3GC022ACN-A	RMOF 2R2 OHM +5% 2.0W	
R504 506 507 508 510 515	RM3GC033ACN-3	RMOF 3R3 OHM +5% 2.0W	
R509	RM3GC047ACN-9	RMOF 4R7 OHM +5% 2.0W	
PO72	H01-RP3NA0101NN-A	POS 100R0 OHM 16.0V	
PO71	H01-RP3NA0101NZ-3	POS 100R0 OHM 16.0V RED	
VR71 72 73 74	RT6BA0201NB-A	PR 200R0 OHM +30% 100MI0W	
NJ13	SO0A18P8CNN-7	JACK-TELE SNAP-IN GOLDEN TELECOM GDL1-8P8C 8T BK 0 0	
NJ14	H01-SOPA81900NN-8	CONN-SPE TERMINAL SPKR 8P SH081136JP FE 19MM 8 -- 0 0	
NJ12	H01-SORA40RSANN-6	JACK RCA 4P JB040131ZN GN BN PP TA	
NJ11	H01-SORA40RSCNN-A	JACK RCA 4P JB040131QN WH BU RD GY	
Q329 330 433 434	H01-TR2SA1859BC-2	TR-SHPLF 2SA1859A P -2.0A	
Q335 336 439 440	H01-TR2SA1986BE-5	TR-SHPLF 2SA1986-R P -15.0A	
Q701 702 703 704	H01-TR2SC4137BE-0	TR-SHPLF 2SC4137 N 100MI0A 20V	
Q331 332 435 436	H01-TR2SC4883BC-8	TR-SHPLF 2SC4883A N 2.0A	
Q333 334 437 438	H01-TR2SC5358BO-6	TR-SHPLF 2SC5358-R N 15.0A	
REWORK DSPBD W601	H01-WC1164605C1-7	WCL 460-05-05 UL1007 HOOK-UP 16 460MM BK 05 05	
W401	H01-WC1180905C1-1	WCL 090-05-05 UL1007 HOOK-UP 18 90MM BK 05 05	
W301	H01-WC1221905C1-9	WCL 190-05-05 UL1007 HOOK-UP 22 190MM BK 05 05	
N801 802 803 804	H01-WG02SB80800-0	WIRECONASY UNIQUE 2 80MM UL1007 PVC DISCRETE 26	
N807 809	H01-WG03SB82100-7	WIRECONASY DL 2.0MM 3P 210MM UL1007 RIBBON 26 12	
N808	H01-WG03SB84400-4	WIRECONASY DL 2.0MM UNIQUE 3P 440MM UL1007 PVC DISCRETE 26 1	
P812 813 815 816	H01-WN02SB00000-9	CONN 2.0MM 2 MA ST NAT GT201-2P-TS	
P801 802 803 804 810	H01-WN02SD00000-7	CONN 2.5MM 2 MA ST NAT 0 0	
P805 814	H01-WN03SB00000-6	CONN 2.0MM 3 MA ST NAT GT201-3P-TS	
P807	H01-WN03SE00000-3	CON 3.96MM PITCH MOLEX 35313-0310	
P806	H01-WN04SB00000-3	CONN 2.0MM 4 MA ST NAT GT201-4P-TS	
P808	H01-WN08SD00000-0	CONN 2.5MM 8 MA ST NAT 0 0	
P811	H01-WN19SB00000-6	CONN 2.0MM 19 MA ST NAT MOLEX 35336-1910 0 0	
N805	H01-WS8263605EN-8	WIRECONASY DL 2.0MM 8P 360MM UL1533 SHIELD 26 1	
N806	H01-WSE263905EN-5	WIRECONASY DL 2.0MM 15P 390MM UL1533 SHIELD 26 1	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	XY0N211N5WH-4	CABLE TIE W=0.2MM L=11.5CM WHITE @ STRIP	
	XY0P523K000-A	WIRE,IRON,D=0.5MM,N.W=23KG @KG	
	XY0P801K000-A	WIRE TIN D=0.8MM N.W=1.0KG @KG	
	XY1N127N0WH-5	ADHESIVE WHITE D=1.1CM L=27CM @KG	
	XY1N218M3SW-4	GLUE FURROW W=12MML=18.3M SS WHITE @ROLL	
	XY1P202K000-1	WIRE, TIN, D=1.2MM N.W=2.0KG @KG	
	XY5020000AA-0	ADHESIVE SUP-GLUE "AA" #502 TRANS @BOTTL	
	XY57501K0YW-0	GLUE, YELLOW, N.W=1.0KG #575 @KG	
	XY6R301K000-0	BAR,TIN,63/37,N.W=1.0KG @KG	
	XY74601K0WH-9	OINTMENT HTC #SDL-746 NW=1.0KG WHITE @KG	
	XYALC01G000-2	ALCOHOL V=1.0GALLON @GALLON	
	XYRF801G000-7	FLUX #RF-800 V=1.0 GALLON @ GALLON	
	XYWAX10K000-6	ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG	
	XYWD405G000-0	CLEANER,#WD-40,V=5.0 GALLONS @GALLONS	
HK12	H01-ZMC12HS0200-5	AC HEATSINK DIODE 39X26X12 AVR630 -- ME	
HK11	H01-ZMC12HS0300-7	H/SINK REG 118*20*	
070	ZSTBM3010BB-5	SCREW ST BH 3X10	
080	ZSTBM3012BY-A	SCREW ST BH 3X12 PIVOT	
060	ZSTWM3008BY-8	SCREW ST WPH 3X8	
090	ZWM803305PZ-1	WASHER PLAIN 3	
	3SA-3071US-MAAA-1-0	**AC ESABD IAA MAIN BD AXIAL AVR430**	
C101 102 103 104 107 108 109 110 111 112 113 114 115 116 117 118 209	CCKID0101NA-7	CC 100P0F +10% -10% 50.0V Y5P	
C307 308 313 314 403 404 569 570	CCKID0271NN-0	CC 270P0F +10% -10% 50.0V 2B4	
C433 601 602	CCMFD0103NN-4	CC 10N0F +20% -20% 16.0V Y5S	
C333 434	CCMFD0472NN-6	CC 4N7F +20% -20% 16.0V Y5R	
C119 120 212 214 527	CCZID0104NA-2	CC 100N0F +80% -20% 50.0V F	
D205 206 301 302 303 304 305 306 307 308 401 402 403 404 405 406 407 408 409 410 411 412	H01-DG1N04148NB-4	D-SLP 1N4148 100.0V 150E-3A	
D207	H01-DZ1N05231NB-1	D-ZENER 1N5231B 5.1V 500MI0W	
D204	H01-DZMTZ12V0NB-0	D-ZENER MTZJ 12.0V 500MI0W	
R303 304 477 478	RC3DI0100IN-2	RCF 10R0 OHM +5% 250MI0W	
R101 102 105 106 109 110 113 114 213 215 221 353 354 369 370 457 458 459 460 609 614	RC3DI0101IN-0	RCF 100R0 OHM +5% 250MI0W	
R211 603	RC3DI0102IN-9	RCF 1K0 OHM +5% 250MI0W	
R485 516 605 606 608 610 611 613	RC3DI0103IN-7	RCF 10K0 OHM +5% 250MI0W	
R207 214 216 217 218 219 220 309 310 479 480 503 604	RC3DI0104IN-5	RCF 100K0 OHM +5% 250MI0W	
R701 707 710 711	RC3DI0122IN-3	RCF 1K2 OHM +5% 250MI0W	
R607 612	RC3DI0123IN-1	RCF 12K0 OHM +5% 250MI0W	
R363 364 365 366 461 462 463 464	RC3DI0150IN-9	RCF 15R0 OHM +5% 250MI0W	
R380 381 386 387 481 483 488 490	RC3DI0152IN-5	RCF 1K5 OHM +5% 250MI0W	
R341 342 343 344 384 385 437 438 439 440 482 489	RC3DI0153IN-3	RCF 15K0 OHM +5% 250MI0W	
R311 312 313 314 405 406 407 408	RC3DI0162IN-2	RCF 1K6 OHM +5% 250MI0W	
R339 340 345 346 347 348 349 350 433 434 435 436 441 442 443 444	RC3DI0201IN-7	RCF 200R0 OHM +5% 250MI0W	
R317 318 319 320 321 322 409 410 411 412 413 414	RC3DI0221IN-1	RCF 220R0 OHM +5% 250MI0W	
R390 391 486 492	RC3DI0223IN-8	RCF 22K0 OHM +5% 250MI0W	
R371 372 373 374 465 466 467 468 615	RC3DI022AIN-2	RCF 2R2 OHM +5% 250MI0W	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
R497 702 705 708 709	RC3DI0271IN-8	RCF 270R0 OHM +5% 250MI0W	
R209 498	RC3DI0273IN-4	RCF 27K0 OHM +5% 250MI0W	
R224	RC3DI0274IN-2	RCF 270K0 OHM +5% 250MI0W	
R301 302 401 402	RC3DI0331IN-5	RCF 330R0 OHM +5% 250MI0W	
R225 305 306 403 404	RC3DI0333IN-1	RCF 33K0 OHM +5% 250MI0W	
R382 383 484 487 491 501 502	RC3DI0393IN-5	RCF 39K0 OHM +5% 250MI0W	
R307 308 415 416	RC3DI0433IN-8	RCF 43K0 OHM +5% 250MI0W	
R315 316 593 594	RC3DI0471IN-0	RCF 470R0 OHM +5% 250MI0W	
R223	RC3DI0513IN-A	RCF 51K0 OHM +5% 250MI0W	
R323 324 325 326 329 330 333 334 335 336 337 338 421 422 423 424 425 426 427 428 429 430 431 432	RC3DI0561IN-A	RCF 560R0 OHM +5% 250MI0W	
R375 376 469 470	RC3DI0820IN-1	RCF 82R0 OHM +5% 250MI0W	
R493	RC3DI0822IN-8	RCF 8K2 OHM +5% 250MI0W	
R388 389 473 474	RC3EG0100LN-4	RCF 10R0 OHM +5% 500MI0W	
R331 332 419 420	RM1DI0162IN-5	RMF 1K6 OHM +1% 250MI0W	
R327 328 417 418	RM1DI0333IN-4	RMF 33K0 OHM +1% 250MI0W	
R351 352 367 368 445 446 447 448	H01-RM3EG0100LN-A	RMF 10R0 OHM +5% 500MI0W	
	3SA-3071US-MAAR-1-2	**AC ESABD IAR MAIN BD RADIAL AVR430**	
C315 316 409 410	CCDIC0030NE-3	CC 3P0F +0P25F -0P25F 50.0V NP0	
C317 318 411 412	CCKIC0181NA-0	CC 180P0F +10% -10% 50.0V Y5P	
C329 330 425 426	CCKIC0222NA-1	CC 2N2F +10% -10% 50.0V Y5P	
C331 332 407 408	CEHEC0227NN-A	CE 220U0F +20% 10.0V 85C	
C432	CEHEC0477MN-A	CE 470U0F +20% 10.0V 6.3X11 85C	
C206 208 213 309 310 405 406 526	CEHGC0107NN-6	CE 100U0F +20% 25.0V 6.3X1185C	
C210	CEHIC0105NN-7	CE 1U0F +20% 50.0V 5X11 85C	
C211 301 302 319 320 321 322 401 402 413 414 415 416 429 518 519 520 521 522 523	CEHIC0106NN-5	CE 10U0F +20% 50.0V 85C	
C207	CEHIC0475NN-7	CE 4U7F +20% 50.0V 85C	
C325 326 327 328 417 418 419 420	CFIJC0104NN-7	CPM 100N0F +10% 63.0V	
C501 502 503	CFIOC0104NN-5	CPM 100N0F +10% 250.0V	
C323 324 430 431	CFLJC0683NN-7	CPM 68N0F +5% 63.0V	
C506 507 508 511 512 513 516 528 529	CPIKC0473NN-0	CPF 47N0F +10% 100.0V	
F501 502 503 504 505 506	H01-FURN2200006-6	FUSE T 2A 250V 7.6X8.6 SS-5 SAVE FUSETECH	
Q309 310 411 412	H01-TR2SA1145NA-2	TR-SLPLF 2SA1145Y TO-92MOD P -50MI0A -150V	
Q443	H01-TRKRC107MNA-9	TR-SLPSWA KRC107M N	
Q315 316 319 320 327 328 417 418 421 422 431 432 442	H01-TRKTA1024NA-7	TR-SLPLF KTA1024 Y P 50MI0A -150V	
Q605 607	H01-TRKTA1266NA-0	TR-SLPLF KTA1266 Y P 150MI0A	
Q311 312 410 413 414	H01-TRKTA1268NA-4	TR-SHPLF KTA1268BL P 100MI0A 120V	
Q307 308 407 408 426 441 606 608	H01-TRKTC3198NA-3	TR-SLPLF KTC3198BL N 150MI0A	
Q301 302 303 304 305 306 313 314 337 338 401 402 403 404 405 406 409 415 416 425	H01-TRKTC3200NA-9	TR-SHPLF KTC3200BL N 100MI0A 120V	
Q317 318 321 322 323 324 419 420 423 424 429 430	H01-TRKTC3206NA-A	TR-SLPLF KTC3206 Y N 50MI0A 150V	
Q602	H01-TRKTD1302NA-0	TR-SLPLF KTD1302 B N 300MI0A 20V	
G101 102	H01-ZNMSA4004SN-4	TERMLUG GND	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3071US-PA00-1-5	**AC BOM PKG AVR430**	
	H01-ATALF039ABK-A	ANTENNA WIRE ANTENNA LOOP CT01-AM 0 0	
	BTA3A1511SF-0	BATTERY ALKALINE 1.5V AAA	
	H01-RYC1001HA00-0	REMOCON AVR430	BK
	H01-RYD0101HA00-8	REMOCON AVR430 EU	IB
	H01-RYC1202HA00-5	REMOCON ZONE 2	
	H01-WAB01200203-9	ANTENNA WIRE 75 CT02-FM 0 0	BK
	H01-WAD01200303-3	ANTENNA WIRE 75 OHM WIRE CT03-FM 00	IB
	H01-WAUSA2103BK-1	POWER CORD WS-004C+002E SJT#14*2C L=2M	BK
	H01-WAD022000BK-2	WR002 H05VVF 0.75MMSQ 2G BLACK 2000MM	IB
	XY0M51K5M00-3	MEMBRANE POLY TRANS W=0.5M L=1.5KM @ROLL	
	XY1N218M3CL-9	GLUE TRANSPARENT W=12MM L=18.3M @ROLL	
	XY7N636M5CL-8	Glue, Transparent,W=76mm, L=36.5m @m	
	XYGLAA5K200-3	GLASS CLEANER,N.W=0.52KG @BOTTL	
	XYJBLA4L800-5	WAX JUBILEE, CLEANER V=0.48LITER @BOTTLE	
	ZBP00020350-4	POLYBAG BATTERY	
	ZBP00122051-8	BAG PE 330 X245 T0.05	
	ZHC1201AAWH-A	FILM SHEET PE 920 X 1000	
	ZKC1001HB00-4	MANUAL AVR430	BK
	ZKD0101HA00-A	MANUAL AVR430 EU	IB
	ZKC1004HA00-5	BOX CARTON AVR430	BK
	ZKD0104HA00-9	BOX CARTON AVR430 EU	IB
	ZKC1016HA00-3	QUICK SETUP GUIDE AVR430	
	ZKC1073HA00-7	LABEL BARCODE AVR430	BK
	ZKD0173HA00-0	LABEL BARCODE AVR430 EU	IB
	ZKC1113HA00-9	CARD WARRANTY	
	ZKC11H96A00-1	POLISHING CLOTH	
	ZKC1214HA00-A	LABEL SAFETY LEAFLET	BK
	ZKD0114HA00-4	SAFETY MANUAL EU	IB
	ZKC1263HA00-0	INSERT RS232 NOTE PAPER	
	ZKC1270HA00-7	LABEL "PLEASE"	
	ZKGEN43HA00-0	CARD INSERT ENVELOPE	
	ZKGEN56HA00-5	ENVELOPE POLISHING CLOTH	
	ZKGEN73HA00-7	LABEL BARCODE BLANK	
	ZQC1101HAWH-2	CUSHION POLY EPS RIGHT AVR430/630	
	ZQC1102HAWH-9	CUSHION POLY EPS LEFT AVR430/630	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3071US-POMI-1-0	**AC EMBD IMA PRO BD AVR430**	
	PBC11KPOB20-7	AVR630 PROCESSOR DUAL PCB 209MM*170MM FR-4	
C20	CEHFC0106NN-4	CE 10U0F +20% 16.0V 85C 5X11	
SK1	H01-RLL1296122A-5	RELAYSGNL 12.0V 960.0OHM 3.0A	
NJ51 52 53 54 55	H01-SORA40GNDNN-7	JACK RCA 4P JB040131PN WWRR	
P20 20-1	H01-WC2260755CG-7	WIRECONASY DL 2.0MM 02P 75MM ANG UL1007 RIBBON 26 1 B2011H02	
P13	H01-WN03SB00000-6	CONN 2.0MM 3 MA ST NAT GT201-3P-TS	
P1 3 12	H01-WN04SB00000-3	CONN 2.0MM 4 MA ST NAT GT201-4P-TS	
P4	H01-WN06SB00000-8	CONN 2.0MM 6 MA ST NAT GT201-6P-TS	
P10	H01-WN08SB00000-2	CONN 2.0MM 8 MA ST NAT GT201-8P-TS	
P2	H01-WN11AB00000-0	CONN 2.0MM 11 MA R NAT SOCKET MOLEX 35237-1110 0 0	
P9	H01-WN15SB00000-7	CONN 2.0MM 15 MA ST NAT GT201-15P-TS	
P6	H01-WN17AB00000-4	CONN 2.0MM 17 MA R NAT SOCKET MOLEX 35237-1710 0 0	
N2 P7	H01-WN19AB00000-9	CONN 2.0MM 19 MA R NAT SOCKET MOLEX 35237-1910 0 0	
	XY0N618M3SW-A	GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL	
	XY0P801K000-A	WIRE TIN D=0.8MM N.W=1.0KG @KG	
	XY1N209M0DW-4	GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL	
	XY1N218M3SW-4	GLUE FURROW W=12MML=18.3M SS WHITE @ROLL	
	XY1P202K000-1	WIRE, TIN, D=1.2MM N.W=2.0KG @KG	
	XY30155G00-0	TCE,CLEANER,-301#,V=55GALL0N,TYPELESS @GALLON	
	XY4N836M5CL-9	GLUE TRANSPARENT W=48MM L=36.5M @ROLL	
	XY6R301K000-0	BAR,TIN,63/37,N.W=1.0KG @KG	
	XYALC01G000-2	ALCOHOL V=1.0GALLON @GALLON	
	XYGLU00K5RD-7	GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG	
	XYJUI00K5GY-5	JUICE TIN N=0.5KG GREY @KG	
	XYRF801G000-7	FLUX #RF-800 V=1.0 GALLON @ GALLON	
	XYWAX10K000-6	ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG	
	3SA-3071US-POAR-1-0	**AC ESABD IAR PRO BD RADIAL AVR430**	
C79 80 82 83 113 114 116 118 139140 142 144	H01-CEHFC0106AH-5	CE 10U0F +20% 16.0V 85C AH SAMYOUNG	
C6 7 13 14 16 17 19 37 38 40 41 56 57 59 60 84 85 87 88 90 91 106 107 121 123 124 125 126 131 147 149 151 152 159 160 162 164 169 170 172 174 190 195 196 197 198 205 206 207	CEHFC0106NN-4	CE 10U0F +20% 16.0V 85C 5X11	
C5 8 15 18 39 42 55 58 78 81 86 89 92 95 96 97 98 99 100 101 102 103 104 105 108 109 112 119 120 122 127 129 132 133 138 145 146 153 158 165 168 175 189 201 202 208 209 210 224 225	CEHFC0476NN-4	CE 47U0F +20% 16.0V 85C	
C176 177	CEHGC0337NN-0	CE 330UI0F +20% 25V 85C	
C221 222	CEHIC0475NN-7	CE 4U7F +20% 50.0V 85C	
GND1	H01-ZNMSA4004SN-4	TERMLUG GND	
	3SA-3071US-POSB-1-1	**AC ESABD SMD BOT PRO BD AVR430**	
C1 2 3 4 9 10 11 12 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 43 44 45 46 47 48 49 50 61 62 63 64 65 67 69 70 71 72 73 110 117 128 135 136 143 155 156 163 166 173 178 179 180 181 182 183 184 191 192 193 194 228 229	CZJII0101BE-2	CCCFMIC 100P0F +5% -5% 50.0V NP0 0603	
C215 216	CZJII0103CC-1	CCCFMIN 10N0F +-5% 50.0V X7R 0805	
C188 203 204 226 227	CZJII0330BE-9	CCCFMIC 33P0F +5% -5% 50.0V NP0	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
C130 134	CZJII0331BE-7	CCCFMIC 330P0F +5% -5% 50.0V NP0	
C94 148	CZKII0222BC-8	CCCFMIC 2N2F +10% -10% 50.0V X7R	
C51 52 185 186 187 211	CZZFI0104BF-8	CCCFMIC 100N0F +80% -20% 16.0V Y5V	
D2	H01-DS0KDS160NB-4	D-SLP KDS160 85.0V 100MI0A	
IC29 30	H01-ICLM02068D2-A	IC-OPERAMP NJM2068M DUAL SOP8	
IC10	H01-ICTC9273NDA-0	IC-SWITCH TC9273F-004 SOP28 ANALOG SWITCH	
J7 8 9 10 11 12 26 38 39 40 41 R317 318	RS3AD0000NA-0	RMGCFMIC 0 OHM +0% 62MI5W	
R1 10 11 13 18 30 31 44 63 64 77 79 82 88 89 98 107 112 121 126 131 133 136 137 141 142 166 167 171 172 174 184 185 189 195 197 198 201 204 231 238 260 273 288	RS3AD0101NA-5	RMGCFMIC 100R0 OHM +5% 62MI5W	
R3 4 27 29 32 34 46 48 49 51 57 59 61 71 91 92 93 94 95 96 138 139 140 143 144 145 150 151 152 153 154 155 168 169 170 221 229 247 254 256 264 269 277 279 286 293 301 303 310 324 325 326 329 334 343 344 345 346 347 348 349 350	RS3AD0102NA-3	RMGCFMIC 1K0 OHM +5% 62MI5W	
R2 5 12 14 15 16 17 21 26 28 33 35 40 41 42 43 45 47 50 52 58 60 65 66 67 68 85 86 109 110 113 114 119 120 123 124 129 130 146 147 161 162 175 176 181 183 186 188 191 192 193 194 196 199 203 214 217 218 225 233 234 236 239 241 244 245 246 251 252 281 282 287 289 297 305 306 308 311 313 341	RS3AD0104NA-A	RMGCFMIC 100K0 OHM +5% 62MI5W	
R134 163 164 165	RS3AD0123NA-6	RMGCFMIC 12K0 OHM +5% 62MI5W	
R235 237	RS3AD0152NA-A	RMGCFMIC 1K5 OHM +5% 62MI5W	
R132 255 263 270 278 294 302	RS3AD0202NA-A	RMGCFMIC 2K0 OHM +5% 62MI5W	
R208 209 212 216	RS3AD0221NA-6	RMGCFMIC 220R0 OHM +5% 62MI5W	
R210 213 220 226 259 268 274 292 298 315 327 336 337	RS3AD0222NA-4	RMGCFMIC 2K2 OHM +5% 62MI5W	
R200 202	RS3AD0242NA-9	RMGCFMIC 2K4 OHM +5% 62MI5W	
R205 249	RS3AD0272NA-0	RMGCFMIC 2K7 OHM +5% 62MI5W	
R20 56 62 74 115 116 117 118	RS3AD0333NA-6	RMGCFMIC 33K0 OHM +5% 62MI5W	
R222 230	RS3AD0362NA-A	RMGCFMIC 3K6 OHM +5% 62MI5W	
R177 179	RS3AD0432NA-4	RMGCFMIC 4K3 OHM +5% 62MI5W	
R6 9 22 25 36 39 73 76 127 148 149 178 182 187 206 211 284 335 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375	RS3AD0471NA-5	RMGCFMIC 470R0 OHM +5% 62MI5W	
R128	RS3AD0472NA-3	RMGCFMIC 4K7 OHM +5% 62MI5W	
R69 70 102 105 240 250 283 285 307 309 312	RS3AD0512NA-6	RMGCFMIC 5K1 OHM +5% 62MI5W	
R108 111 173 180	RS3AD0821NA-4	RMGCFMIC 820R0 OHM +5% 62MI5W	
R207 215	RS3AD0911NA-3	RMGCFMIC 910 OHM +5% 62MI5W	
R248	RS3AD0912NA-1	RMGCFMIC 9K1 OHM +5% 62MI5W	
Q20	H01-TRDTA114YNI-9	TR-SSD DTA114YKA P 10K0 OHM 47K0 OHM	
Q54	H01-TRDTC114YNI-5	TR-SSD DTC114YKA N 10K0 OHM 47K0 OHM	
Q1 2 19 24 26 27 28 29 30 31 33 36 38 39 40 42 44 45 46	H01-TRKTD1304ND-5	TR-SLPSWA KTD1304 N 20V 300MI0A SOT-23	
	3SA-3071US-POST-1-7	**AC ESABD SMD TOP PRO BD AVR430**	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
C223	CZJII0101BE-2	CCCFMIC 100P0F +5% -5% 50.0V NP0 0603	
C217 218	CZJII0103CC-1	CCCFMIN 10N0F +-5% 50.0V X7R 0805	
C219 220	CZJII0150CE-A	CCCFMIN 15P0F +5% -5% 50.0V NP0 0805	
C66 68 111 115 137 141 154 157 161 167 171 199 200	CZJII0330BE-9	CCCFMIC 33P0F +5% -5% 50.0V NP0	
C213 214	CZJII0682CC-3	CCCFMIN 6N8F +5% -5% 50.0V X7R 0805	
C93 150	CZKII0222BC-8	CCCFMIC 2N2F +10% -10% 50.0V X7R	
C212	CZZFI0104BF-8	CCCFMIC 100N0F +80% -20% 16.0V Y5V	
D8 9 12 14 21	H01-DSUDZ09V1NB-7	D-ZENER UDZS 9.1B 9.1V 200MI0W	
IC5 14	H01-ICKIC9162DA-5	IC-SWITCH KIC9162AF SOP28 ANALOG SWITCH	
IC3	H01-ICKIC9163DA-7	IC-SWITCH KIC9163AF SOP28 ANALOG SWITCH	
IC2 18	H01-ICKIC9459D5-8	IC-LOWFREQ KIC9459F SOP24 TONE/VOL/BAL/MUTE	
IC1 4 7 8 9 12 13 15 16 17 20 21 23 24 25 26 27	H01-ICLM02068D2-A	IC-OPERAMP NJM2068M DUAL SOP8	
IC19	H01-ICLMO9482DA-5	IC-LOWFREQ KIC9482F SOP28 TONE/VOL/BAL/MUTE	
IC22	H01-ICNJM4556DM-0	IC-OPERAMP NJM4556AM DUAL OP	
IC6	H01-ICTC9273NDA-0	IC-SWITCH TC9273F-004 SOP28 ANALOG SWITCH	
IC28	H01-ICTC9481FDA-0	IC-LOWFREQ TC9481F SOP28 TONE	
R75 78 232 242 243 253 280 290 304 314	RS3AD0101NA-5	RMGCFMIC 100R0 OHM +5% 62MI5W	
R72 80 81 122 125	RS3AD0102NA-3	RMGCFMIC 1K0 OHM +5% 62MI5W	
R135 158	RS3AD0123NA-6	RMGCFMIC 12K0 OHM +5% 62MI5W	
R223 262 271 295	RS3AD0183NA-A	RMGCFMIC 18K0 OHM +5% 62MI5W	
R7 8 23 24 37 38 53 54 224 228 257 261 272 276 296 300 316	RS3AD0222NA-4	RMGCFMIC 2K2 OHM +5% 62MI5W	
R156 157 159 160	RS3AD0332NA-8	RMGCFMIC 3K3 OHM +5% 62MI5W	
R19 55 83 84 87 90 97 219 265 266 267 291	RS3AD0333NA-6	RMGCFMIC 33K0 OHM +5% 62MI5W	
R227 258 275 299	RS3AD0474NA-A	RMGCFMIC 470K0 OHM +5% 62MI5W	
Q3 13 14 17 23 25 32 34 35 37 41 43 50	H01-TRDTA114YNI-9	TR-SSD DTA114YKA P 10K0 OHM 47K0 OHM	
Q4 7 8 9 10 11 12 15 16 58 59	H01-TRKTD1304ND-5	TR-SLPSWA KTD1304 N 20V 300MI0A SOT-23	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3071US-SRMI-1-9	**AC EMBD IMA SURROUND BD AVR430**	
	PBC11KSRI20-5	AVR630 SURROND SINGLE PCB 330MM*247MM	
C301 302 401 402 501 502	CEHJA0477MN-9	CE 470U0F +20% 63.0V 85C	
L301 401 501	H01-LCNNNA050NA-1	LFA 1MM 10MM 5 LEFT 0.0MM NONE	
R338 438 538	H01-RI3IC022BEN-8	RW 220MI0 OHM +5% 5.0W 100PPM/'C -100PPM/'C	
R345 445 545	RM3FC0100BN-7	RMOF 10R0 OHM +5% 1.0W	
PO51	H01-RP3NA0101NN-A	POS 100R0 OHM 16.0V	
PO52	H01-RP3NA0101NZ-3	POS 100R0 OHM 16.0V RED	
VR31 32 51	H01-RT7EA0201NB-6	PR 200R0 OHM +20% 500MI0W	
NJ31	H01-SOPA619BKNN-7	CONN-SPE TERMINAL SPKR 6P SH0611708P FE 19MM 6 BK 0 0	
Q316 416 516	H01-TR2SA1859BC-2	TR-SHPLF 2SA1859A P -2.0A	
Q319 419 519	H01-TR2SA1986BE-5	TR-SHPLF 2SA1986-R P -15.0A	
Q314 414 514	H01-TR2SC4137BE-0	TR-SHPLF 2SC4137 N 100MI0A 20V	
Q317 417 517	H01-TR2SC4883BC-8	TR-SHPLF 2SC4883A N 2.0A	
Q318 418 518	H01-TR2SC5358BO-6	TR-SHPLF 2SC5358-R N 15.0A	
REWORK	H01-WC1181655C1-0	WCL 165-05-05 UL1007 HOOK-UP 18 165MM BK 05 05	
W401	H01-WC1220905C1-A	WCL 090-05-05 UL1007 HOOK-UP 22 90MM BK 05 05	
N301	H01-WG03SB84200-0	WIRECONASY DL 2.0MM UNIQUE 3P 420MM UL1007 PVC DISCRETE 26 1	
P301 308 309	H01-WN02AD00000-A	CONN 2.5MM 2 MA R NAT 0 0	
P307	H01-WN03SB00000-6	CONN 2.0MM 3 MA ST NAT GT201-3P-TS	
P303	H01-WN03SE00000-3	CON 3.96MM PITCH MOLEX 35313-0310	
P304	H01-WN04SE00000-0	CON 3.96MM PITCH MOLEX 35313-0410	
N306	H01-WS6262605EN-6	WIRECONASY DL 2.0MM 6P 260MM UL1533 SHIELD 26 1	
	XY0N211N5WH-4	CABLE TIE W=0.2MM L=11.5CM WHITE @ STRIP	
	XY0P523K000-A	WIRE,IRON,D=0.5MM,N.W=23KG @KG	
	XY0P801K000-A	WIRE TIN D=0.8MM N.W=1.0KG @KG	
	XY1N218M3SW-4	GLUE FURROW W=12MML=18.3M SS WHITE @ROLL	
	XY1P202K000-1	WIRE, TIN, D=1.2MM N.W=2.0KG @KG	
	XY57501K0YW-0	GLUE, YELLOW, N.W=1.0KG #575 @KG	
	XY6R301K000-0	BAR,TIN,63/37,N.W=1.0KG @KG	
	XY74601K0WH-9	OINTMENT HTC #SDL-746 NW=1.0KG WHITE @KG	
042	XYALC01G000-2	ALCOHOL V=1.0GALLON @GALLON	
	XYRF801G000-7	FLUX #RF-800 V=1.0 GALLON @ GALLON	
	XYWAX10K000-6	ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG	
	XYWD405G000-0	CLEANER,#WD-40,V=5.0 GALLONS @GALLONS	
	3SA-3071US-SRAA-1-7	**AC ESABD IAA SURROUND BD AXIAL AVR430**	
D301 302 303 304 401 402 403 404 501 502 503 504 601	H01-DG1N04148NB-4	D-SLP 1N4148 100.0V 150E-3A	
R326 336 426 436 526 536	RC3DI0101IN-0	RCF 100R0 OHM +5% 250MI0W	
R601 606	RC3DI0103IN-7	RCF 10K0 OHM +5% 250MI0W	
R346 446 546 605	RC3DI0104IN-5	RCF 100K0 OHM +5% 250MI0W	
R329 429 529	RC3DI0122IN-3	RCF 1K2 OHM +5% 250MI0W	
R328 335 428 435 528 535	RC3DI0150IN-9	RCF 15R0 OHM +5% 250MI0W	
R339 341 439 441 539 541	RC3DI0152IN-5	RCF 1K5 OHM +5% 250MI0W	
R320 321 340 420 421 440 520 521 540	RC3DI0153IN-3	RCF 15K0 OHM +5% 250MI0W	
R309 310 409 410 509 510	RC3DI0162IN-2	RCF 1K6 OHM +5% 250MI0W	
R319 322 323 324 419 422 423 424 519 522 523 524	RC3DI0201IN-7	RCF 200R0 OHM +5% 250MI0W	
R305 306 307 405 406 407 505 506 507	RC3DI0221IN-1	RCF 220R0 OHM +5% 250MI0W	
R344 444 544	RC3DI0223IN-8	RCF 22K0 OHM +5% 250MI0W	
R327 337 427 437 527 537	RC3DI022AIN-2	RCF 2R2 OHM +5% 250MI0W	
R330 430 530	RC3DI0271IN-8	RCF 270R0 OHM +5% 250MI0W	
R301 401 501	RC3DI0331IN-5	RCF 330R0 OHM +5% 250MI0W	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
R302 402 502	RC3DI0333IN-1	RCF 33K0 OHM +5% 250MI0W	
R342 442 542 602 603 604	RC3DI0393IN-5	RCF 39K0 OHM +5% 250MI0W	
R304 404 504	RC3DI0433IN-8	RCF 43K0 OHM +5% 250MI0W	
R308 408 508	RC3DI0471IN-0	RCF 470R0 OHM +5% 250MI0W	
R311 314 315 316 317 318 411 414 415 416 417 418 511 514 515 516 517 518	RC3DI0561IN-A	RCF 560R0 OHM +5% 250MI0W	
R334 434 534	RC3DI0820IN-1	RCF 82R0 OHM +5% 250MI0W	
R343 443 543	RC3EG0100LN-4	RCF 10R0 OHM +5% 500MI0W	
R313 413 513	RM1DI0162IN-5	RMF 1K6 OHM +1% 250MI0W	
R312 412 512	RM1DI0333IN-4	RMF 33K0 OHM +1% 250MI0W	
R303 325 333 403 425 433 503 525 533	H01-RM3EG0100LN-A	RMF 10R0 OHM +5% 500MI0W	
	3SA-3071US-SRAR-1-9	**AC ESABD IAR SURROUND BD RADIAL AVR430**	
C307 407 507	CCDIC0030NE-3	CC 3P0F +0P25F -0P25F 50.0V NP0	
C309 409 509	CCKIC0181NA-0	CC 180P0F +10% -10% 50.0V Y5P	
C304 306 404 406 504 506	CCKIC0271NA-A	CC 270P0F +10% -10% 50.0V Y5P	
C331 431 531	CCKIC0332NA-5	CC 3N3F +10% -10% 50.0V Y5P	
C320 420 520	CCKIC0472NA-0	CC 4N7F +10% -10% 50.0V Y5P	
C308 408 508	CEHEC0227NN-A	CE 220U0F +20% 10.0V 85C	
C305 405 505	CEHGC0107NN-6	CE 100U0F +20% 25.0V 6.3X1185C	
C303 311 312 403 411 412 503 511 512 601	CEHIC0106NN-5	CE 10U0F +20% 50.0V 85C	
C313 314 413 414 513 514	CFIJC0104NN-7	CPM 100N0F +10% 63.0V	
C310 410 510	CFLJC0683NN-7	CPM 68N0F +5% 63.0V	
Q305 405 505	H01-TR2SA1145NA-2	TR-SLPLF 2SA1145Y TO-92MOD P -50MI0A -150V	
Q308 311 315 408 411 415 508 511 515	H01-TRKTA1024NA-7	TR-SLPLF KTA1024 Y P 50MI0A -150V	
Q306 406 506 601	H01-TRKTA1268NA-4	TR-SHPLF KTA1268BL P 100MI0A 120V	
Q304 404 504	H01-TRKTC3198NA-3	TR-SLPLF KTC3198BL N 150MI0A	
Q301 302 303 307 320 401 402 403 407 420 501 502 503 507 520	H01-TRKTC3200NA-9	TR-SHPLF KTC3200BL N 100MI0A 120V	
Q309 312 313 409 412 413 509 512 513	H01-TRKTC3206NA-A	TR-SLPLF KTC3206 Y N 50MI0A 150V	
G601 602 603 604 605	H01-ZNMSA4004SN-4	TERMLUG GND	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3071US-SUMI-1-4	**AC EMBD IMA SUPP BD AVR430**	
	PBC11KSUI20-7	AVR630 SUPPLY SINGLE PCB 163MM*330MM FR-1	BK
	PBD02KSUI20-0	AVR630EU SUPPLY SINGLE PCB 163MM*330MM FR-1	IB
C103	CEHJA0477MN-9	CE 470U0F +20% 63.0V 85C	
C201 202	H01-CEMJA0828MN-7	CE 8MI2F +20% 63.0V 85C	
D201	H01-DRBU10040BA-6	D-BRDLC BRIDGE BU10-04	
F101	H01-FUGF210A0XX-7	FUSULSLWBL 10.0 A 250.0 V	BK
F101	H01-FUGF205A000-4	FUSE 50T 250V 5A 217 SERIES	IB
F1	H01-FUGF23000XX-A	FUSE 239 SERIES 003 250V 3A	BK
F1	H01-FUGF202A0XX-4	FUSVDETIMELG 2.0A 250.0 V 5X20	IB
IC11	H01-ICKIA7805I2-7	IC-REGPOSFXD KIA7805API NORMAL TO-220IS	
R101	H01-RA4EG0335LN-9	RA 3M3 OHM +10% 500MI0W	BK
SK11	H01-RLL1227111K-1	RELAYPWR 12.0V 270.0OHM 10.0A	
R104	RM3GC0390CN-8	RMOF 39R0 OHM +5% 2.0W	
NS21	H01-SOPA21275BK-3	CONN-SPE AC OUTLET 2P 110V FE 12.75MM 2 BK 0 0	BK
NS21	H01-SOPA20019BK-A	CONN-SPE AC OUTLET 2P 220V FE 19MM2 BK 0 0	IB
NJ70	H01-SORA1JE01NN-0	JACK RCA 1P JE010003MN GND OR	
NJ79	H01-SOTOR179LBA-0	D-LEM TORX-179L	
TP11	H01-TXPWMS630A0-6	TF-LAM ST/BY-TRANSFORMER AVR630 120V	BK
TP11	H01-TXPWMSD02A0-1	TF-LAM ST/BY-TRANSFORMER AVR630EU 230V	IB
W700	H01-WG01S083000-8	WIRECONASY UNIQUE 1P 300MM UL1007 PVC DISCRETE 22 2	
N209	H01-WG02SE81500-3	WIRECONASY DL 3.96MM 2P 150MM UL1007 RIBBOM 16 1	
N202	H01-WG03SE81700-4	WIRECONASY DL 3.96MM 3P 170MM UL1007 RIBBON 16 1	
N203	H01-WG04SE82400-7	WIRECONASY DL 3.96MM 4P 240MM UL1007 RIBBON 16 1	
P207 208	H01-WN02SE00000-6	CON 3.96MM PITCH HEADER 2 POS MOLEX 35328-0210	
P201	H01-WN04SE00000-0	CON 3.96MM PITCH MOLEX 35313-0410	
P206	H01-WN07SD00000-3	CNT PLUG ST 2.5mm 7P 5267-07A	
N700	H01-WS5267605CN-A	CNT ASSY 2.0MM 5P 760MM SHIELD 26AWG UL1007	
	XY0N211N5WH-4	CABLE TIE W=0.2MM L=11.5CM WHITE @ STRIP	
	XY0N618M3SW-A	GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL	
	XY0P523K000-A	WIRE,IRON,D=0.5MM,N.W=23KG @KG	
	XY0P801K000-A	WIRE TIN D=0.8MM N.W=1.0KG @KG	
	XY1N209M0DW-4	GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL	
	XY1N218M3SW-4	GLUE FURROW W=12MML=18.3M SS WHITE @ROLL	
	XY1P202K000-1	WIRE, TIN, D=1.2MM N.W=2.0KG @KG	
	XY30155G00-0	TCE,CLEANER,-301#,V=55GALL0N,TYPELESS @GALLON	
	XY4N836M5CL-9	GLUE TRANSPARENT W=48MM L=36.5M @ROLL	
	XY57501K0YW-0	GLUE, YELLOW, N.W=1.0KG #575 @KG	
	XY6R301K000-0	BAR,TIN,63/37,N.W=1.0KG @KG	
	XY74601K0WH-9	OINTMENT HTC #SDL-746 NW=1.0KG WHITE @KG	
	XYALC01G000-2	ALCOHOL V=1.0GALLON @GALLON	
	XYGLU00K5RD-7	GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG	
	XYRF801G000-7	FLUX #RF-800 V=1.0 GALLON @ GALLON	
	XYWAX10K000-6	ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG	
HK11	H01-ZMC12HS0100-3	AC HEATSINK 17*15*30 AVR520 -- ME	
BK70	H01-ZMC12S17A00-0	AC PUN SHIELD DIGITAL ET	
060	ZSTBM3010BB-5	SCREW ST BH 3X10	
	3SA-3071US-SUAA-1-2	**AC ESABD IAA SUPPLY BD AXIAL AVR430**	
C101 108 109 113 114	CCZID0104NA-2	CC 100N0F +80% -20% 50.0V F	
D111 114	H01-DG1N04148NB-4	D-SLP 1N4148 100.0V 150E-3A	
D101 102 104 105 106 107 110 112 301	H01-DR1N04004NA-1	D-SR 1N4004 400.0V 1.0A	
D113	H01-DZ1N05231NB-1	D-ZENER 1N5231B 5.1V 500MI0W	
D109	H01-DZ1N5239BNB-A	D-ZENER 1N5239B 9.1V 500MI0W	
D115 116	H01-DZMTZJ22BNB-8	DIODE RECT MTZ J 22B 22V 0.5W	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
R109 114 301	RC3DI0102IN-9	RCF 1K0 OHM +5% 250MI0W	
R105 111	RC3DI0103IN-7	RCF 10K0 OHM +5% 250MI0W	
R110	RC3DI0104IN-5	RCF 100K0 OHM +5% 250MI0W	
R1	RC3DI0153IN-3	RCF 15K0 OHM +5% 250MI0W	
R107	RC3DI0272IN-6	RCF 2K7 OHM +5% 250MI0W	
R102 103	RC3DI047AIN-1	RCF 4R7 OHM +5% 250MI0W	
R106	RC3DI0562IN-8	RCF 5K6 OHM +5% 250MI0W	
	3SA-3071US-SUAR-1-4	**AC ESABD IAR SUPPLY BD RADIAL AVR430**	
C105 106 107 110	CCKIC0103NA-9	CC 10N0F +10% -10% 50.0V Y5P	
C118	CCMOC0472NF-9	CC 4N7F +20% -20% 250.0V Y5V	
C111	CEHGC0477NN-6	CE 470U0F +20% 25.0V 85C	
C112	CEHGC0687NN-6	CE 680U0F +20% 25.0V 85C	
C115 117	CEHIC0105NN-7	CE 1U0F +20% 50.0V 5X11 85C	
C116	CEHIC0106NN-5	CE 10U0F +20% 50.0V 85C	
C104	CEHIC0107NN-3	CE 100U0F +20% 50.0V 85C	
C203 204 205	CFIOC0104NN-5	CPM 100N0F +10% 250.0V	
C102	CFLJC0224NN-6	CPM 220N0F +5% 63.0V	
FH10 11 13 14	H01-SOPS1FEHDNN-9	TERMFUSEHLDR FUSE-HOLDER J4210020001X	
Q101 102	H01-TRMPSA06NNA-4	TR-SLPLF MPSA06 N 500MI0A TO-92	
G101 102	H01-ZNMSA4004SN-4	TERMLUG GND	
	3SA-3071US-SUSB-1-5	**AC ESABD SMD SUPPLY BD AVR430**	
C701 702	CZZFI0104BF-8	CCCFMIC 100N0F +80% -20% 16.0V Y5V	
L701 702	H01-FB2K52012NN-5	FBEAD SURFACE MT 2500OHM FCM2012H-252T02	
R701	RS3AD0102NA-3	RMGCFMIC 1K0 OHM +5% 62MI5W	

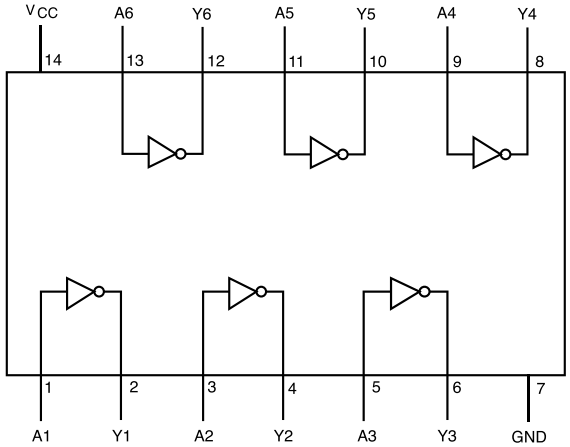
REF NO.	PARTS NO.	DESCRIPTION	TYPE
	3SA-3071US-VDMI-1-6	**AC EMBD IMA VIDEO BD AVR430**	
	PBC11KVDI20-2	AVR630 VIDEO SINGLE PCB 197MM*247MM FR-1	
For below rework	CCZID0104NA-2	CC 100N0F +80% -20% 50.0V F	
C152 199	CEHEC0227NN-A	CE 220U0F +20% 10.0V 85C	
C121	CEHFC0106NN-4	CE 10U0F +20% 16.0V 85C 5X11	
C117	CEHFC0476NN-4	CE 47U0F +20% 16.0V 85C	
L101	H01-FB05B3580NN-1	BEAD AXIAL/TAP,HC3580 80.5ohm	
IC18	H01-ICKIA7806I2-9	IC KIA7806AP VOLTQAGE REGULATOR TO-220AB	
IC40 51 52	H01-ICPC17T10B1-2	IC PHOTOCOUPLER PC-17T1 DIP4 KODENSHI	
Y100	H01-OSXBE14M3AU-7	CRYSTAL 14.31818MHz WOOIN	
Y101	H01-OSXBE17M7AU-9	CRYSTAL 17.734475MHz WOOIN	
SK11 12	H01-RLL0517811A-A	RELAY D3009(1-1462033-4)	
NJ51 52 53	H01-SOJW2350SNN-A	JACK PHONE 3.6 EP-1401A 1P BK	
NJ50	SOPA96063NN-0	JACK D-SUB 9P 87204-6063 W/DUST COVER BK	
NJ92 93 94 95 96 97 98	H01-SORA11Y00NN-5	JACK RCA+S VIDEO C5016031DN	
NJ91	H01-SORA90GNDNN-8	JACK RCA 9P JB090148TN GNDCAP RDX3,BUX3,GNX3	
NJ81	H01-SOSS9CKX3NN-9	JACK PHONE 6.35 H70980110S 9P BK	
W101	H01-WC1160705C1-9	WCL 070-05-05 UL1007 HOOK-UP 16 70MM BK 5 5	
P605	H01-WN06AB00000-0	CONN 2.0MM 6 MA R NAT GT201-6P-LS	
P500	H01-WN06SB00000-8	CONN 2.0MM 6 MA ST NAT GT201-6P-TS	
P604	H01-WN06SB01000-9	CNT PLUG BD'BD PLUG 2.0mm 35336-0610 6P	
N902	H01-WN17AB00000-4	CONN 2.0MM 17 MA R NAT SOCKET MOLEX 35237-1710 0 0	
P901	H01-WN17SB00000-1	CONN 2.0MM 17 MA ST NAT MOLEX 35336-1710 0 0	
N602	H01-WN19AB00000-9	CONN 2.0MM 19 MA R NAT SOCKET MOLEX 35237-1910 0 0	
P601	H01-WN19AI00000-2	CONN 1.25MM 19 FE ANG WH GF120-19S-LS 2794 A6	
P602 603	H01-WN19SB00000-6	CONN 2.0MM 19 MA ST NAT MOLEX 35336-1910 0 0	
N800	H01-WS4265913FN-5	CNT ASSY 2.0MM 4P 590MM SHIELD 26AWG UL2547 1/3	
	XY0N618M3SW-A	GLUE FURROW W=6MM L=18.3M SS WHITE @ROLL	
	XY0P523K000-A	WIRE,IRON,D=0.5MM,N.W=23KG @KG	
	XY0P801K000-A	WIRE TIN D=0.8MM N.W=1.0KG @KG	
	XY1N209M0DW-4	GLUE TAPE W=12MM L=9.0M DS WHITE @ROLL	
	XY1N218M3SW-4	GLUE FURROW W=12MML=18.3M SS WHITE @ROLL	
	XY1P202K000-1	WIRE, TIN, D=1.2MM N.W=2.0KG @KG	
	XY30155G00-0	TCE,CLEANER,-301#,V=55GALL0N,TYPELESS @GALLON	
	XY4N836M5CL-9	GLUE TRANSPARENT W=48MM L=36.5M @ROLL	
	XY6R301K000-0	BAR,TIN,63/37,N.W=1.0KG @KG	
042	XYALC01G000-2	ALCOHOL V=1.0GALLON @GALLON	
	XYGLU00K5RD-7	GLUE, RED, W=0.5KG TYPELESS FOR SMT @KG	
041	XYRF801G000-7	FLUX #RF-800 V=1.0 GALLON @ GALLON	
	XYWAX10K000-6	ANTI-OXIDATION,WAX,W-1#,N.W=10KG,@KG	
BK50	H01-ZMC12S16A00-A	BKT GROUND	
	3SA-3071US-VDAA-1-4	**AC ESABD IAA VIDEO BD AXIAL AVR430**	
D102 104 400	H01-DG1N04148NB-4	D-SLP 1N4148 100.0V 150E-3A	
D108	H01-DZ1N5239BNB-A	D-ZENER 1N5239B 9.1V 500MI0W	
L100 102 109	H01-FB05B3580NN-1	BEAD AXIAL/TAP,HC3580 80.5ohm	
L104 105 106 108 110 801	H01-LAINB0470CR-2	LF 47U0H +10% 5.8 OHM 500MI0A	
L107	H01-LAINB056ACR-0	LF 5U60H +10% 5.8 OHM 500MI0A	
R131 132 133 134 135 161 162 163	RC3DI0102IN-9	RCF 1K0 OHM +5% 250MI0W	
R160	RC3DI0103IN-7	RCF 10K0 OHM +5% 250MI0W	
R204	RC3DI0121IN-5	RCF 120R0 OHM +5% 250MI0W	
R801 802	RC3DI022AIN-2	RCF 2R2 OHM +5% 250MI0W	
R203 407	RC3DI0471IN-0	RCF 470R0 OHM +5% 250MI0W	
	3SA-3071US-VDAR-1-6	**AC ESABD IAR VIDEO BD RADIAL AVR430**	
C142 143 171 174	CCJIC0390NE-2	CC 39P0F +5% -5% 50.0V NP0	
C183	CCKIC0103NA-9	CC 10N0F +10% -10% 50.0V Y5P	

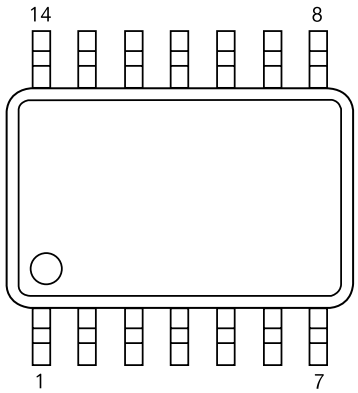
REF NO.	PARTS NO.	DESCRIPTION	TYPE
C202	CCKIC0223NN-6	CC 22N0F +10% -10% 50.0V Z5R	
C501	CEHDC0107NN-5	CE 100U0F +20% 6.3V 85C 5X11	
C172 186 196	CEHEC0107NN-9	CE 100U0F +20% 10.0V 5X11 85C	
C100 102 103 105 106 108 109 111 136 138 203 205 289 295	CEHEC0227NN-A	CE 220U0F +20% 10.0V 85C	
C130 131 132 133 134 135	CEHEC0477MN-A	CE 470U0F +20% 10.0V 6.3X11 85C	
C901 902 903 904 905 906 907 908	CEHFC0106MN-5	CE 10U0F 16.0V 5X11 P2.5MM	
C101 104 107 110 116 122 137 204 206 213	CEHFC0106NN-4	CE 10U0F +20% 16.0V 85C 5X11	
C909 910	CEHFC0107MN-3	CAP ELEC 100U0F 16.0V M 5X11 P2.5MM	
C151 188 190 192 194 291 293	CEHFC0107NN-2	CE 100U0F +20% 16.0V 85C	
C115 153 161 313	CEHFC0476NN-4	CE 47U0F +20% 16.0V 85C	
C128 164 167 169	CEHIC0105NN-7	CE 1U0F +20% 50.0V 5X11 85C	
C185 198	CEHIC0106NN-5	CE 10U0F +20% 50.0V 85C	
C184 201	CEHIC02255N-0	CE 2U2F +20% 50.0V 85C 5X11	
C176	CEHIC0474NN-9	CE 470N0F +20% 50.0V 85C 5X11	
C503 504 505 506 507	CEHKC0105MN-5	CE 1U0F +20% 100.0V 85C	
C165	H01-CEMIC0334AH-4	CAP ELEC 0.33UF M 5X11 SHL SAMYOUNG	
C144	CPIIC0223NN-4	CPF 22N0F +10% 50.0V	
C168	CPIIC0682NN-5	CPF 6N8F +10% 50.0V	
Q101 104 111	H01-TR2SA933ANW-2	TR-SLPLF 2SA933ASR P -3.0A -20V	
Q100 112 114	H01-TR2SC1740NW-9	TR-SLPLF 2SC1740S R N 150MI0A 50V	
Q107 110	H01-TRDTC114YNW-6	TR-SLPLF DTC114YSA N 100MI0A	
Q400 501 502	H01-TRKTA107MNA-7	TR-SLPSWA KRA107M P	
	3SA-3071US-VDST-1-2	**AC ESABD SMD VIDEO BD AVR430**	
C163	CZEII0100BE-0	CCCFMIC 10P0F +0P5F -0P5F 50.0V NP0	
C112 113 114 118 119 120 125 126 155 156 157 158 159 160 178 180 921 922 923 924 925 926 927 928	CZJII0101BE-2	CCCFMIC 100P0F +5% -5% 50.0V NP0 0603	
C123	CZJII0181BE-0	CCCFMIC 180P0F +5% -5% 50.0V NP0	
C175	CZJII0270BE-1	CCCFMIC 27P0F +5% -5% 50.0V NP0	
C177	CZJII0330BE-9	CCCFMIC 33P0F +5% -5% 50.0V NP0	
C124 200	CZJII0331BE-7	CCCFMIC 330P0F +5% -5% 50.0V NP0	
C173 181 187 197	CZKII0103BC-5	CCCFMIC 10N0F +10% -10% 50.0V X7R	
C170	CZKII0561BC-8	CCCFMIC 560P0F +10% -10% 50.0V X7R	
C150 154 162 189 191 193 195 248 292 294 311 401 502 508 509 801 804 911 912 913 914 915 916 917 918	CZZFI0104BF-8	CCCFMIC 100N0F +80% -20% 16.0V Y5V	
D101 106 107 109 110 501 502 503 504 505 506 507 801 802	H01-DS1S50094NB-A	D-SLP 1SS355 35.0V 225MI0A	
L501 502 503 504	H01-FB2K52012NN-5	FBEAD SURFACE MT 2500OHM FCM2012H-252T02	
IC19 20	H01-ICBU4094BD3-2	IC CMOS BU4094BF SOP16	
IC22	H01-ICLC74763I4-1	IC OSD LC74763M SOP30	
IC901 902 903 904	H01-ICLM02068D2-A	IC-OPERAMP NJM2068M DUAL SOP8	
IC14 25 26	H01-ICMM1501XDL-A	IC-VIDEO SW MM1501XNRE SOT-26B	
IC13 15 23	H01-ICMM1505XDL-3	IC-VIDEOPROC MM1505XNRE AMPLIFIER&DRIVER	
IC27	H01-ICMM1511XDL-8	IC-VIDEO SW MM1511XNRE SOT-26B	
IC10 11 12	H01-ICNJM2296D3-7	IC-LINEAR NJM2296	
IC50	H01-ICUPD4721D8-3	IC-SPECFUNC UPD4721 DRIVERS/RECEIVERS CMOS RS-232C	
J101 104 105 106 108 112 113 125 126 128 132 135 138 139 234 257 308 309 310 315 316 317 911 912 913 914 915 916 R157 158 180 184 921 922 923 924 925 926 927 928	RS3AD0000NA-0	RMGCFMIC 0 OHM +0% 62MI5W	
R190	RS3AD0101NA-5	RMGCFMIC 100R0 OHM +5% 62MI5W	
R130 148 149 176 183	RS3AD0102NA-3	RMGCFMIC 1K0 OHM +5% 62MI5W	

REF NO.	PARTS NO.	DESCRIPTION	TYPE
R112 113 114 118 119 120 124 125 126 159 165 175 188 191 199 206 207 208	RS3AD0103NA-1	RMGCFMIC 10K0 OHM +5% 62MI5W	
R510 941 942 943 944 945 946 947 948	RS3AD0104NA-A	RMGCFMIC 100K0 OHM +5% 62MI5W	
R153 155	RS3AD0105NA-8	RES CHIP 1M 1/16W +-5% 0603	
R150 154 156	RS3AD0121NA-A	RMGCFMIC 120R0 OHM +5% 62MI5W	
R146 147	RS3AD0123NA-6	RMGCFMIC 12K0 OHM +5% 62MI5W	
R186	RS3AD0124NA-4	RMGCFMIC 120K0 OHM +5% 62MI5W	
R931 932 933 934 935 936 937 938	RS3AD0151NA-1	RMGCFMIC 150R0 OHM +5% 62MI5W	
R152	RS3AD0152NA-A	RMGCFMIC 1K5 OHM +5% 62MI5W	
R171 198	RS3AD0154NA-6	RMGCFMIC 150K0 OHM +5% 62MI5W	
R170	RS3AD0200NA-3	RES,CHIP 20 OHM 1/16W +/-5% 0603	
R167 173	RS3AD0222NA-4	RMGCFMIC 2K2 OHM +5% 62MI5W	
R187	RS3AD0224NA-0	RMGCFMIC 220K0 OHM +5% 62MI5W	
R192	RS3AD0243NA-7	RMGCFMIC 24K0 OHM +5% 62MI5W	
R200 511	RS3AD0271NA-2	RMGCFMIC 270R0 OHM +5% 62MI5W	
R193	RS3AD0272NA-0	RMGCFMIC 2K7 OHM +5% 62MI5W	
R166 172	RS3AD0333NA-6	RMGCFMIC 33K0 OHM +5% 62MI5W	
R189 406 504	RS3AD0392NA-1	RMGCFMIC 3K9 OHM +5% 62MI5W	
R508 512	RS3AD0470NA-7	RMGCFMIC 47R0 OHM +5% 62MI5W	
R503	RS3AD0471NA-5	RMGCFMIC 470R0 OHM +5% 62MI5W	
R501 502	RS3AD0472NA-3	RMGCFMIC 4K7 OHM +5% 62MI5W	
R405 509 513	RS3AD0473NA-1	RMGCFMIC 47K0 OHM +5% 62MI5W	
R197	RS3AD0513NA-4	RMGCFMIC 51K0 OHM +5% 62MI5W	
R101 104 107 110 116 122 127 128 129 168 174 178	RS3AD0680NA-7	RMGCFMIC 68R0 OHM +5% 62MI5W	
R151	RS3AD0682NA-3	RMGCFMIC 6K8 OHM +5% 62MI5W	
R100 102 103 105 106 108 109 111 115 117 121 123 136 137	RS3AD0750NA-1	RMGCFMIC 75R0 OHM +5% 62MI5W	
R169	RS3AD0822NA-2	RMGCFMIC 8K2 OHM +5% 62MI5W	
Q102 103	H01-TRDTA114YNI-9	TR-SSD DTA114YKA P 10K0 OHM 47K0 OHM	
Q105 106 113	H01-TRDTC114YNI-5	TR-SSD DTC114YKA N 10K0 OHM 47K0 OHM	

IC BLOCK DIAGRAMS

1.M74HCU04
DSP PART IC701.702





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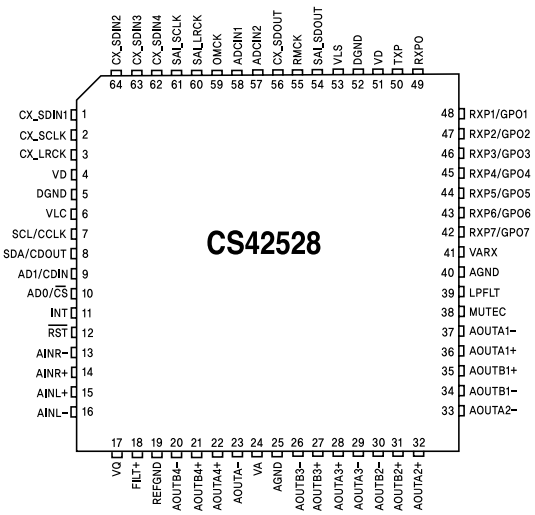

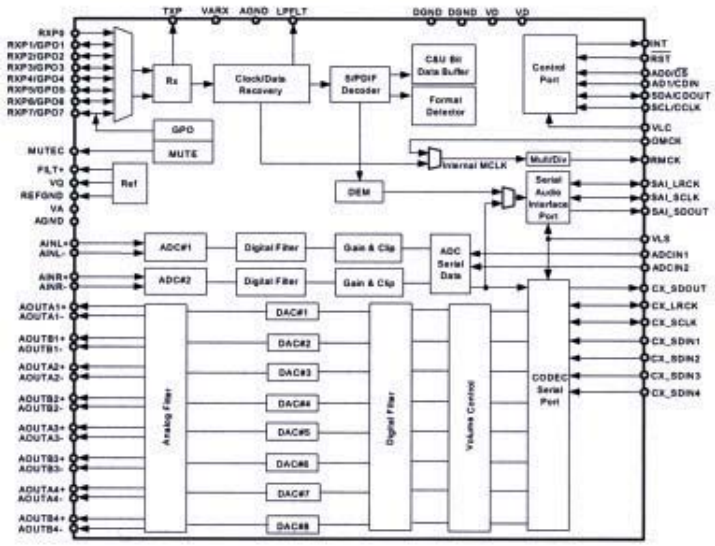

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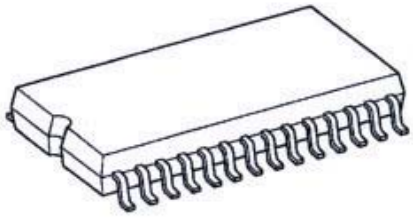

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4.TOTX179L
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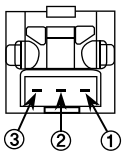
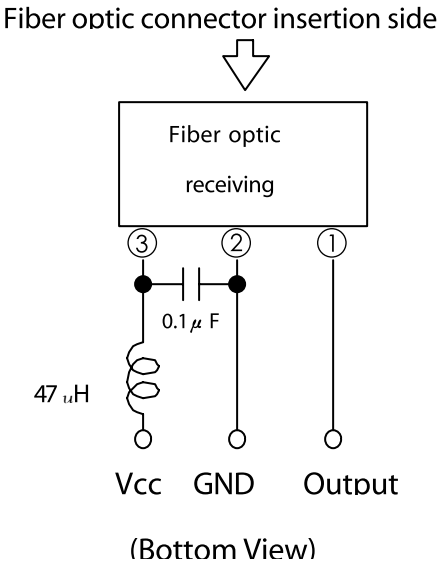


Pin connection
1. Output
2. GND
3. Vcc



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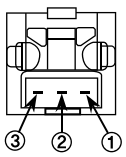
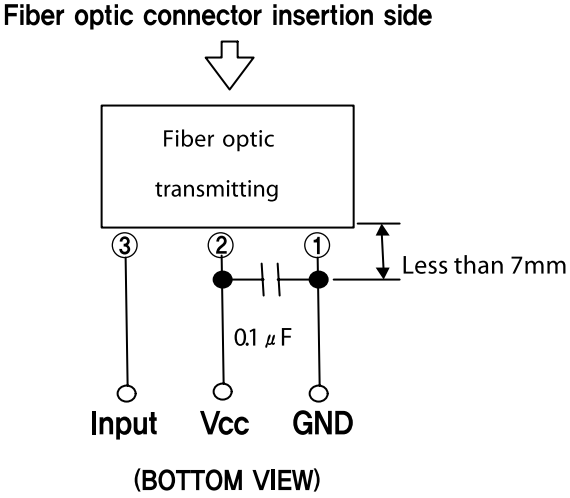
DSP PART NJ74.NJ75
SUPPLY PART NJ79



Pin connection
1. GND
2. Vcc
3. Input



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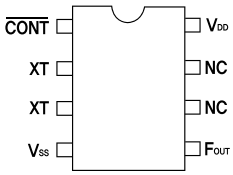
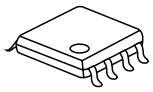
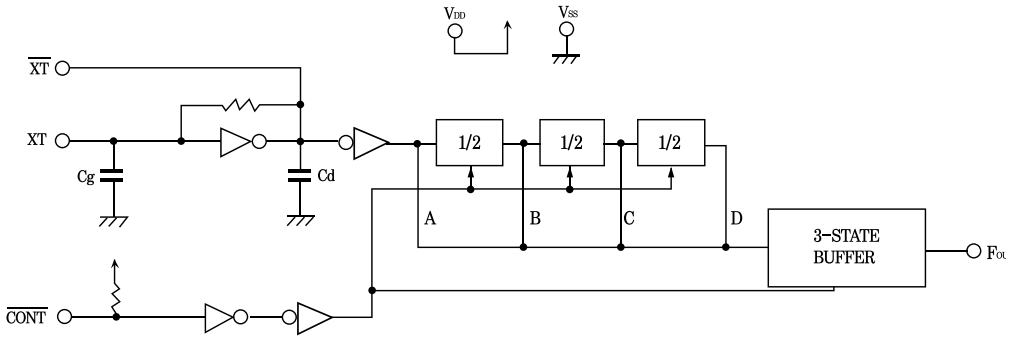
DSP PART IC803

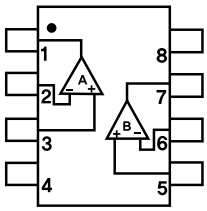


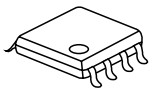


NJU6324XE



6.NJM4566AM
PROCESSOR PART IC22



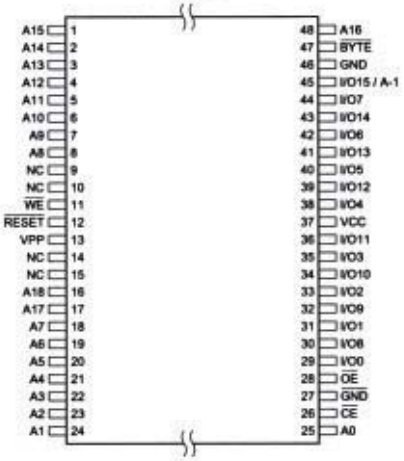


NJM4556AM

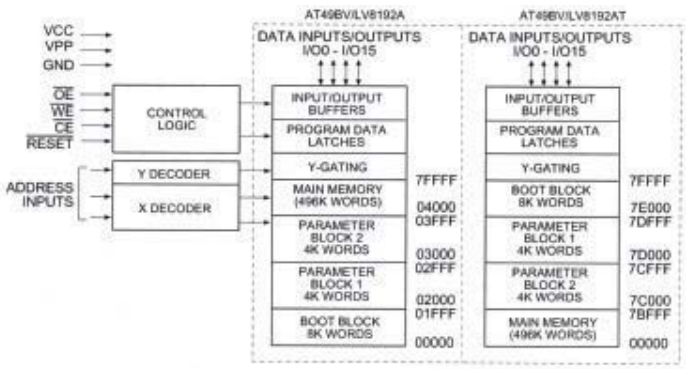
NJM4556AD
NJM4556AM
NJM4556AV

7.AT492V8192A
DSP PART IC804

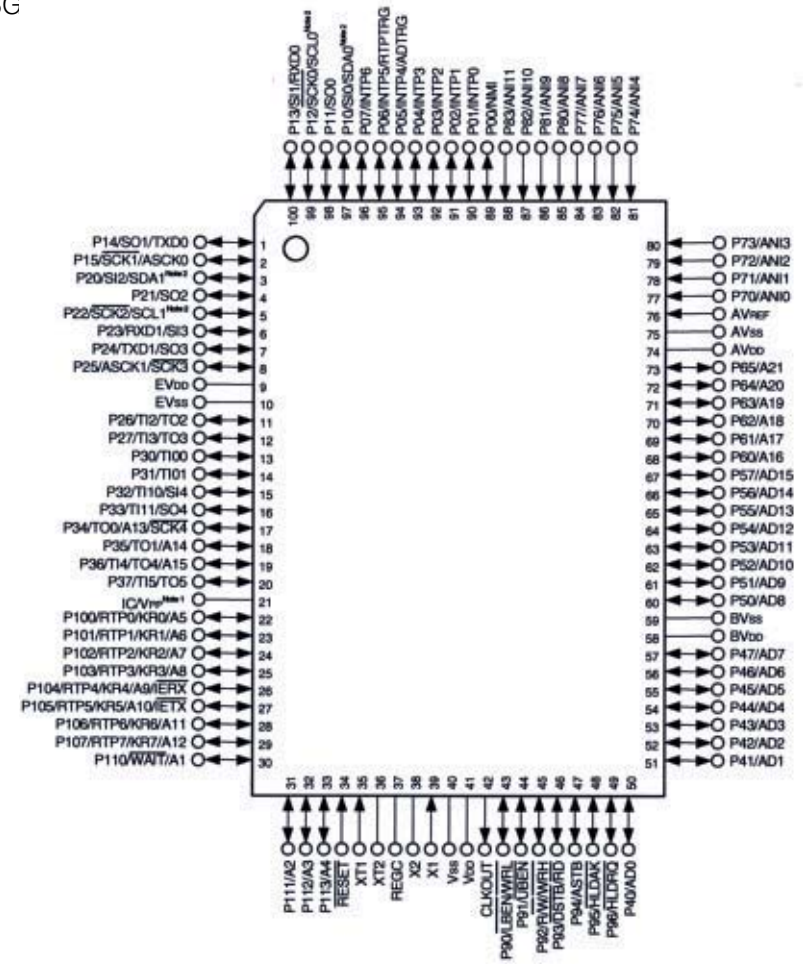
AT49BV/LV8192A(T) TSOP Top View
Type 1

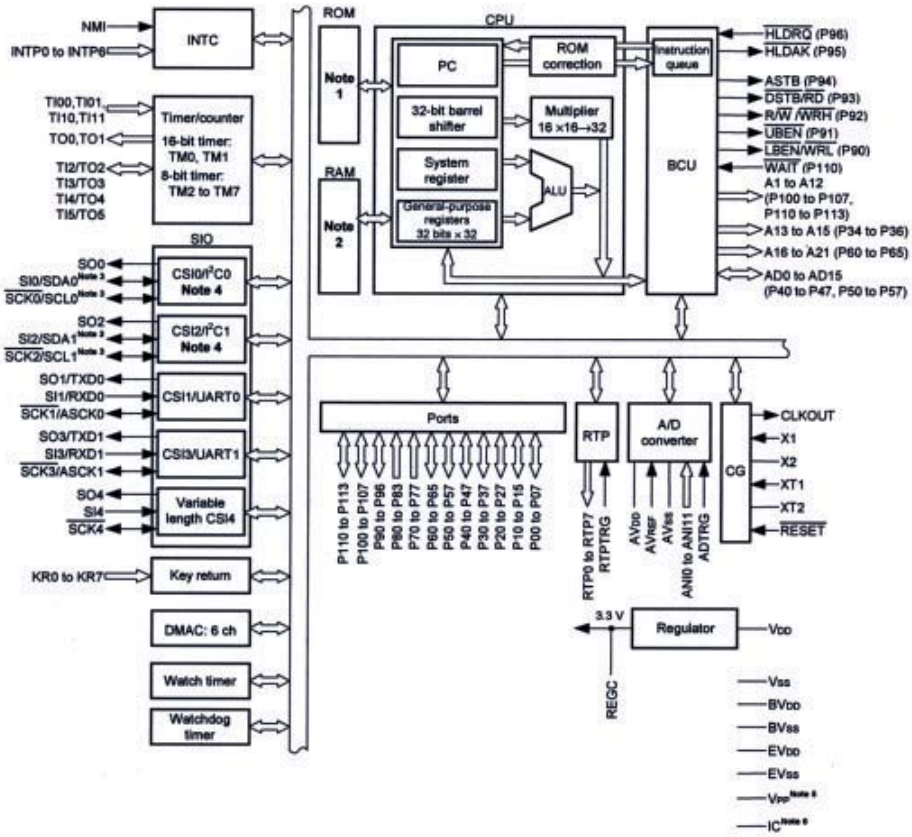


AT49BV/LV8192A(T) Block Diagram



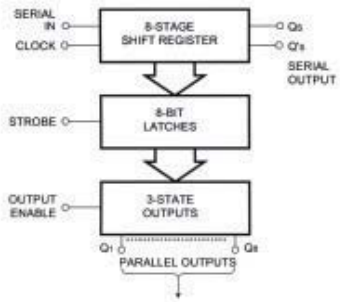
8.UPD70F3033BG
DSP PART

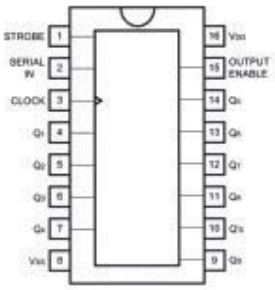


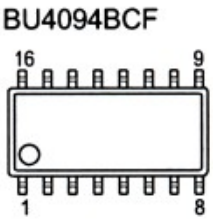


9.BU4094BCF

DSP PART	IC602
VIDEO PART	IC19.IC20
FRONT PARRT	IC101

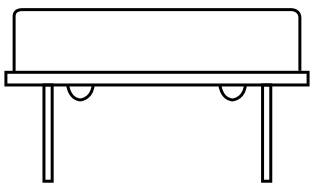


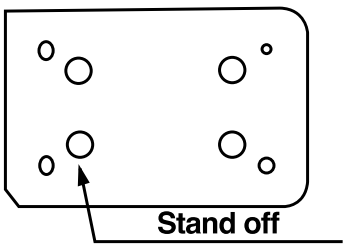




10.VCOX 24M576HZ

DSP PART	Y800



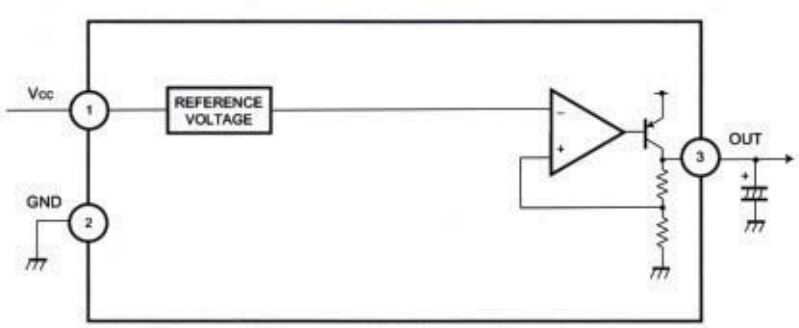


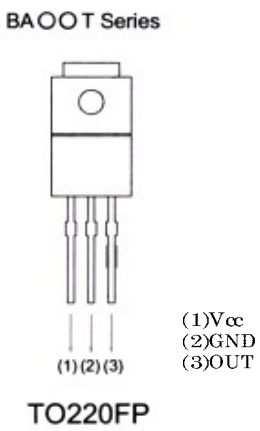
<14 PIN DIP>

PIN	CONNECTION
# 1	INH or No Connection
# 7	Ground
# 8	Output
# 14	Vdc

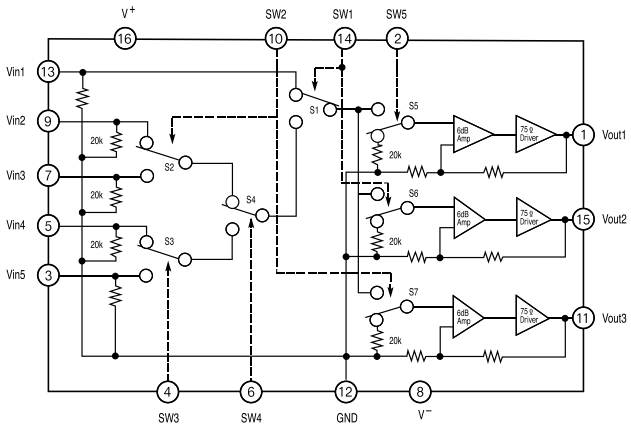
11.BA033T

MAIN PART	IC53

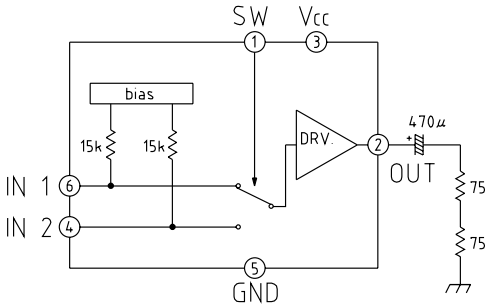


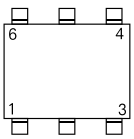


12.NJM2296M
VIDEO PART
IC10.11.12

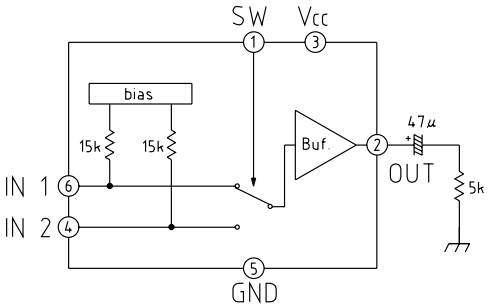


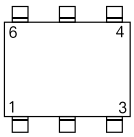
13.MM1505
VIDEO PART
IC13.15.23



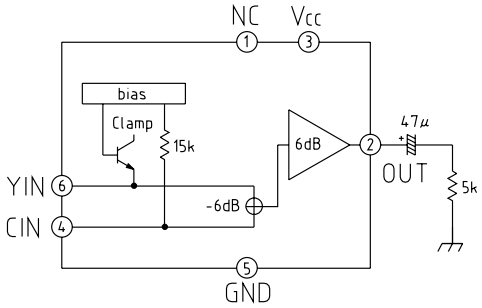


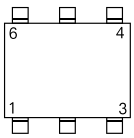
14.MM1501
VIDEO PART
IC14,25,26



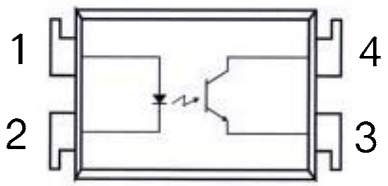


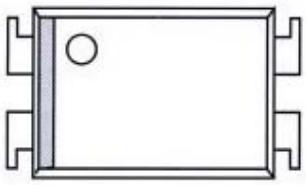
15.MM1511
VIDEO PART
IC27





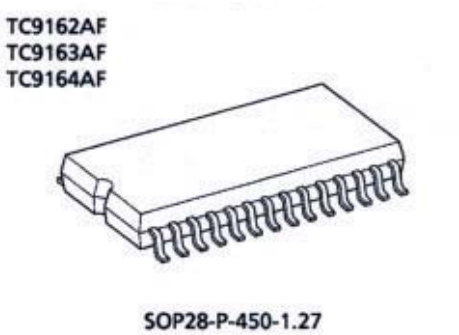
16.PHOTOCOUPLER PC-17T1
VIDEO PART IC40.51.52





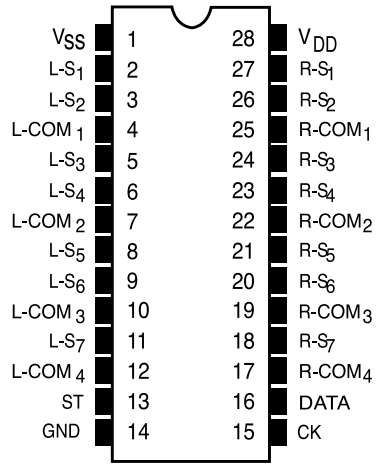
PIN Connections
1.Anode
2.Cathode
3.Emitter
4.Collector

17.TC9162AF PROCESSOR PART IC14

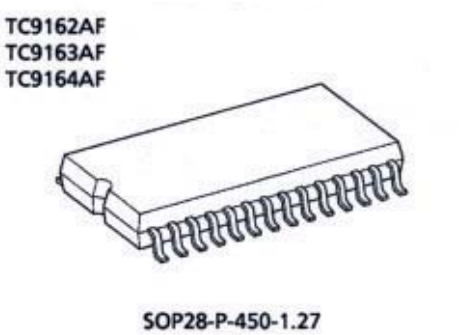


PIN CONNECTION (TOP VIEW)

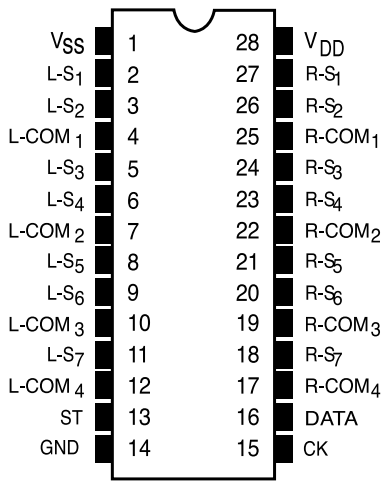
TC9162AN/AF


VSS 1 28 VDD
L-S1 2 27 R-S1
L-S2 3 26 R-S2
L-COM1 4 25 R-COM1
L-S3 5 24 R-S3
L-S4 6 23 R-S4
L-COM2 7 22 R-COM2
L-S5 8 21 R-S5
L-S6 9 20 R-S6
L-COM3 10 19 R-COM3
L-S7 11 18 R-S7
L-COM4 12 17 R-COM4
ST 13 16 DATA
GND 14 15 CK

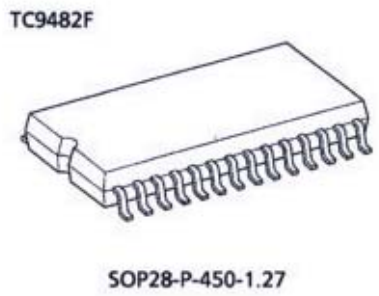
18.TC9163AF PROCESSOR PART IC3

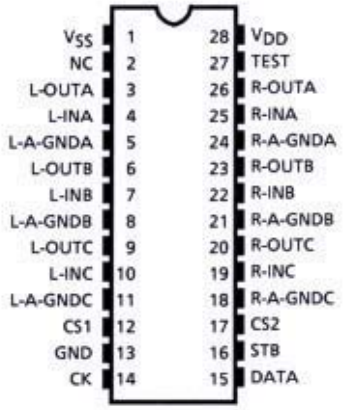


TC9162AN/AF

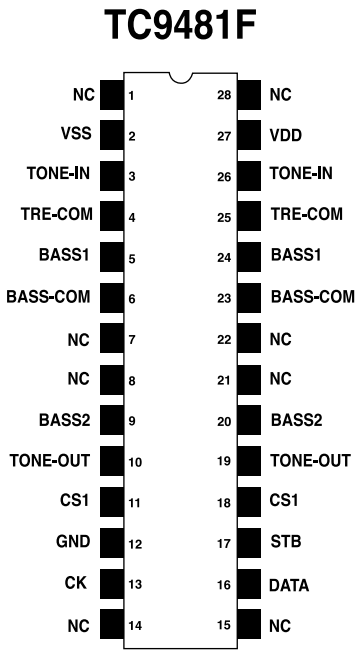

VSS 1 28 VDD
L-S1 2 27 R-S1
L-S2 3 26 R-S2
L-COM1 4 25 R-COM1
L-S3 5 24 R-S3
L-S4 6 23 R-S4
L-COM2 7 22 R-COM2
L-S5 8 21 R-S5
L-S6 9 20 R-S6
L-COM3 10 19 R-COM3
L-S7 11 18 R-S7
L-COM4 12 17 R-COM4
ST 13 16 DATA
GND 14 15 CK

19.TC9482F
PROCESSOR PART IC19

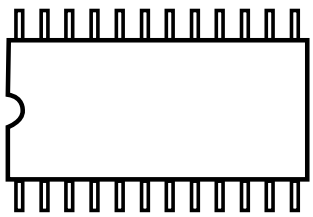


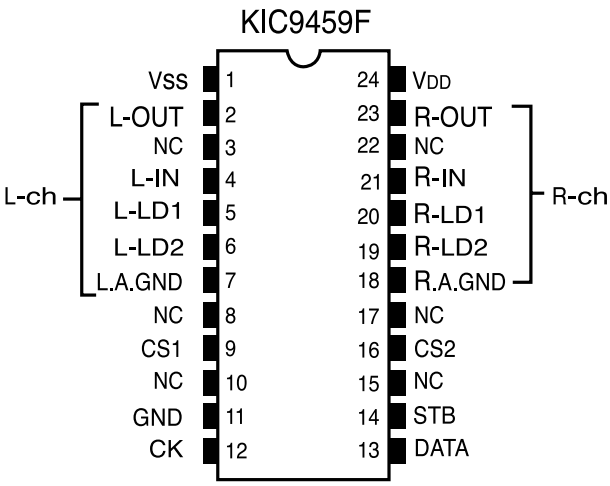


20.TC9481F
PROCESSOR IC28

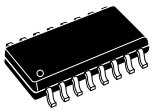


21.KIC9459F
PROCESSOR IC2, 18

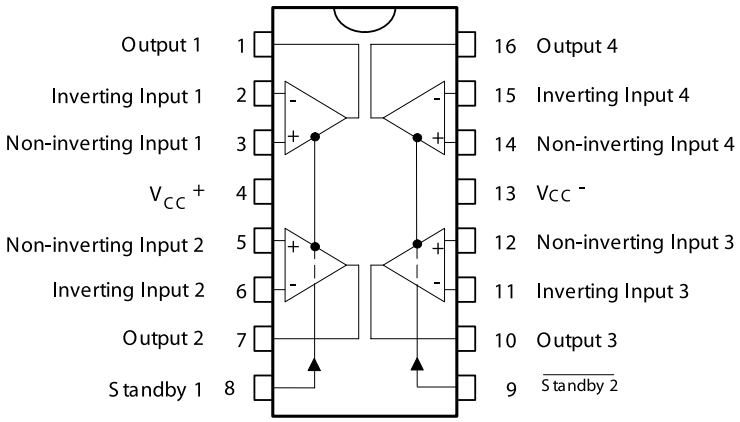




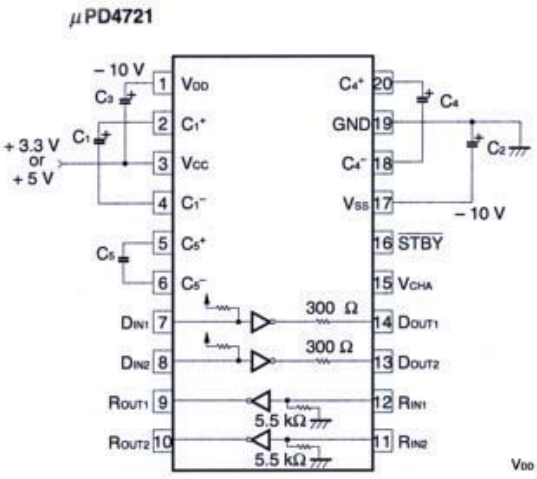
22.TSH95
VIDEO PART IC17

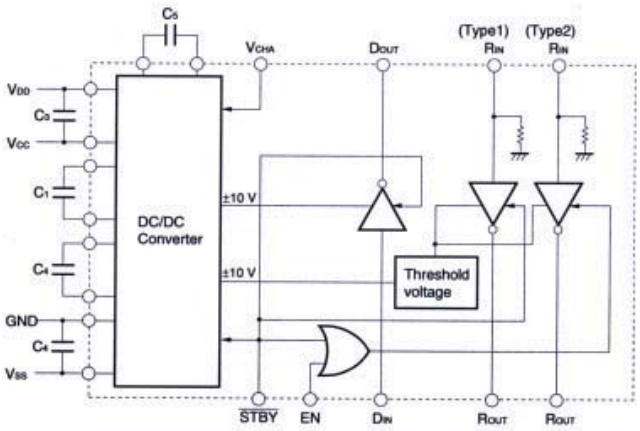


D
SO16
(Plastic Micropackage)

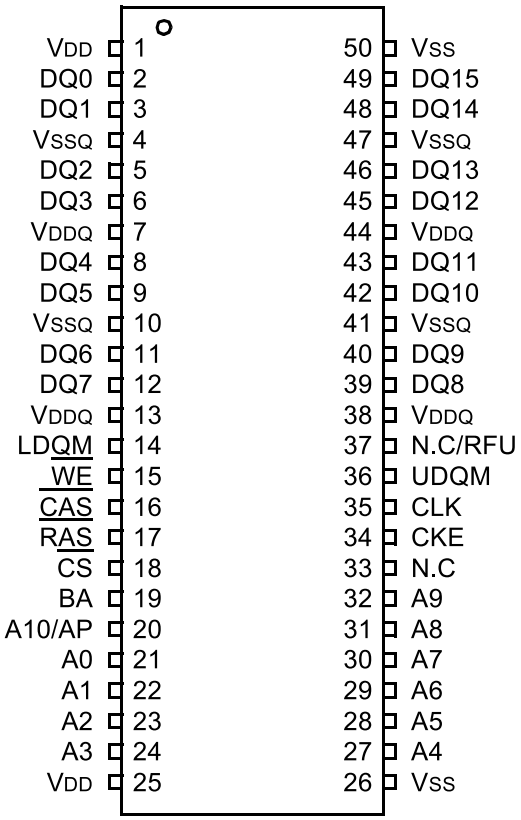


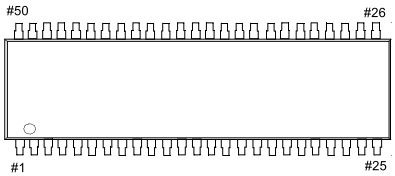
23.MPD4721
VIDEO PART IC50

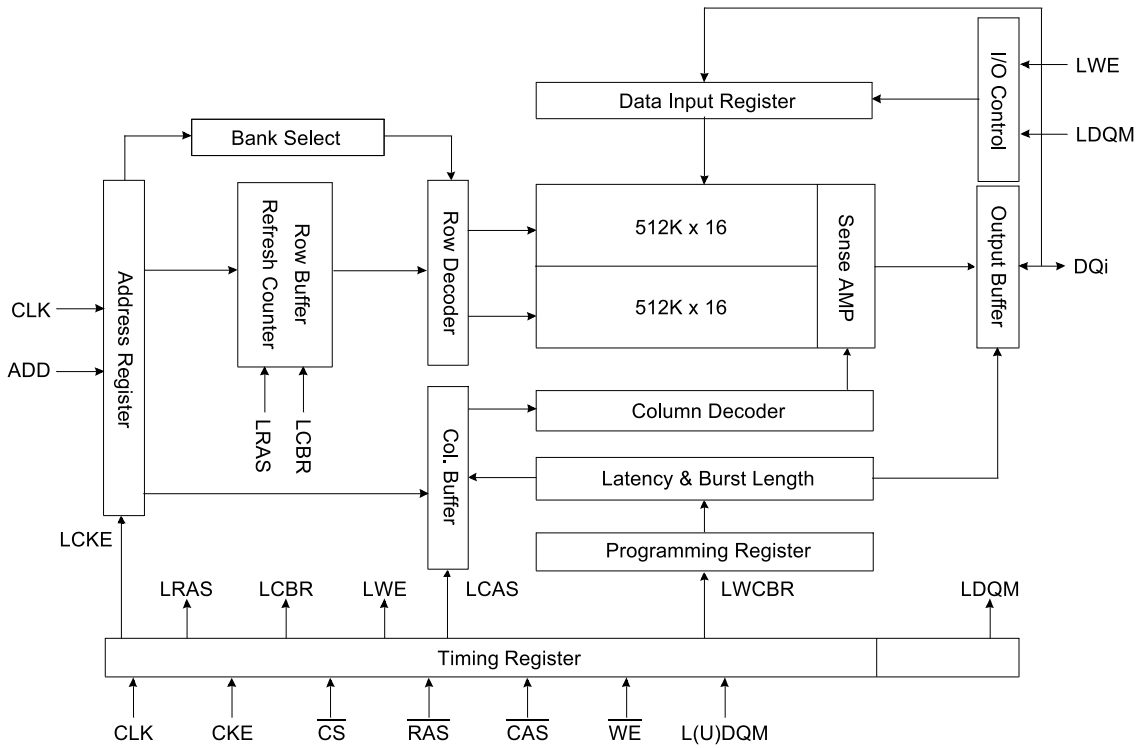




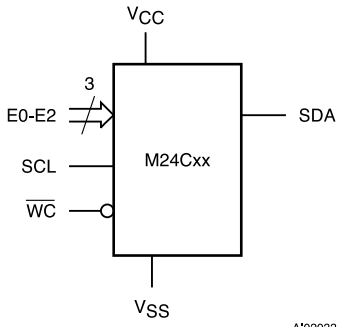
24.K4S161622D-TC80
DSP PART IC805

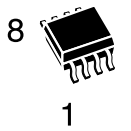






25.M24C04
DSP PART IC603



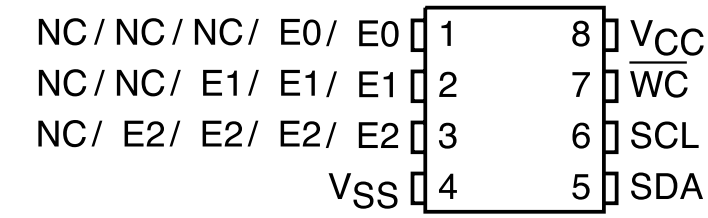


SO8 (MN)
150 mil width

E0, E1, E2	Chip Enable
SDA	Serial Data
SCL	Serial Clock
$\overline{WC}$	Write Control
V_{CC}	Supply Voltage
V_{SS}	Ground

M24Cxx

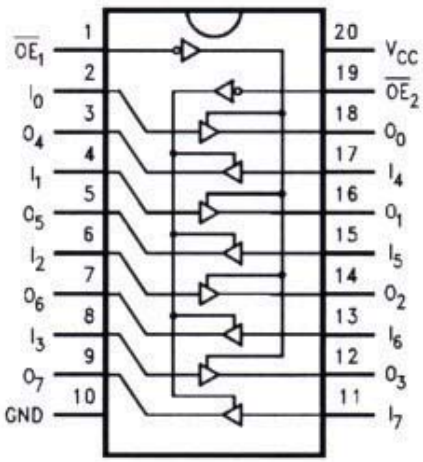
16Kb/8Kb/4Kb/2Kb/1Kb

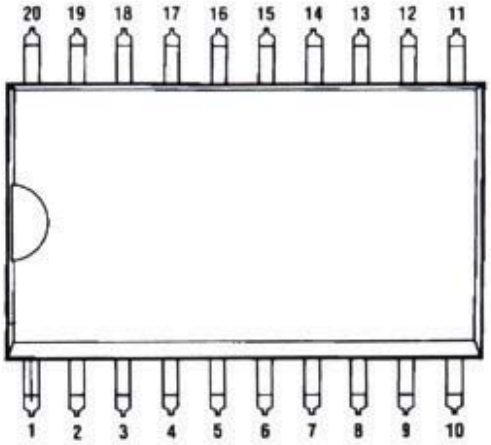


26.74VHC2441A
DSP PART IC802

74VHCT24A
DSP PART IC801

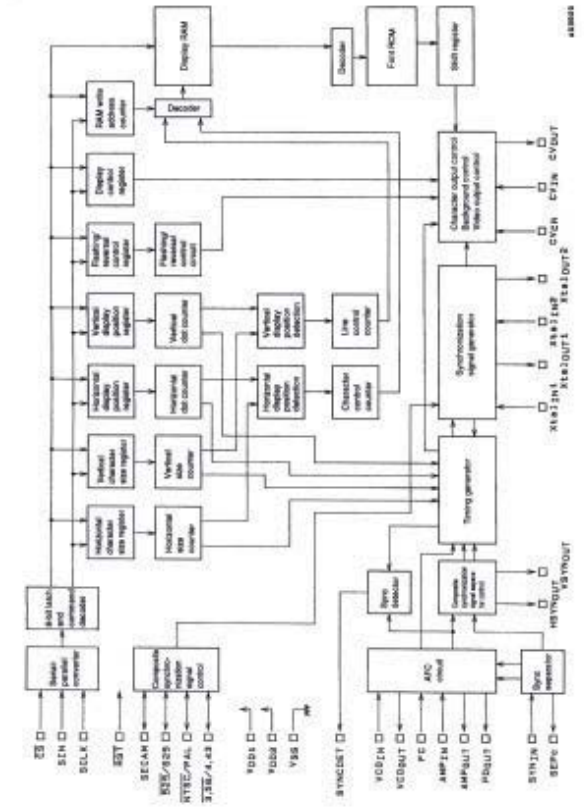
Connection Diagram

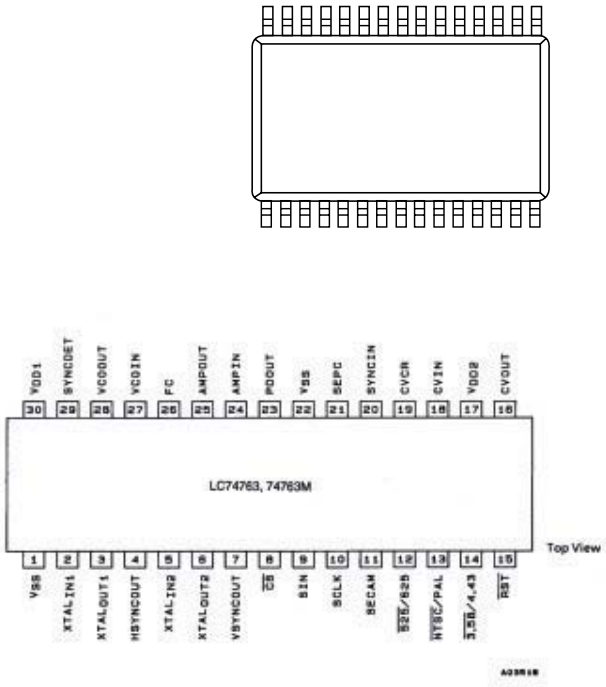




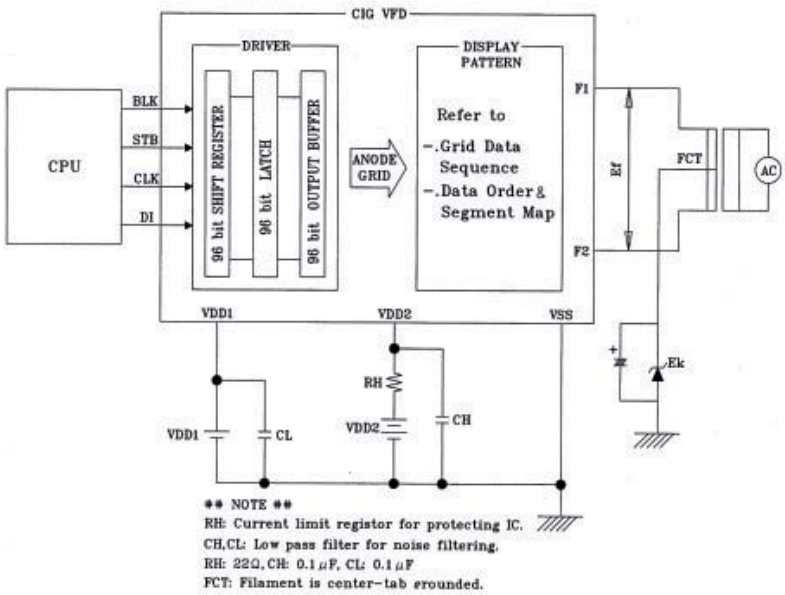
27.2C74763M
VIDEO PART IC22

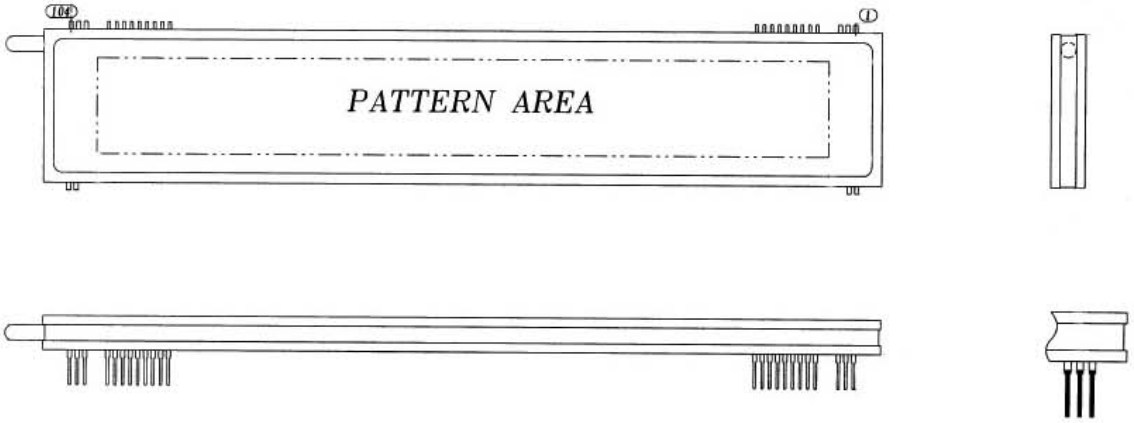
System Block Diagram





28.FL
HCA-18LL03
FRONT PART DP10





PIN CONNECTION

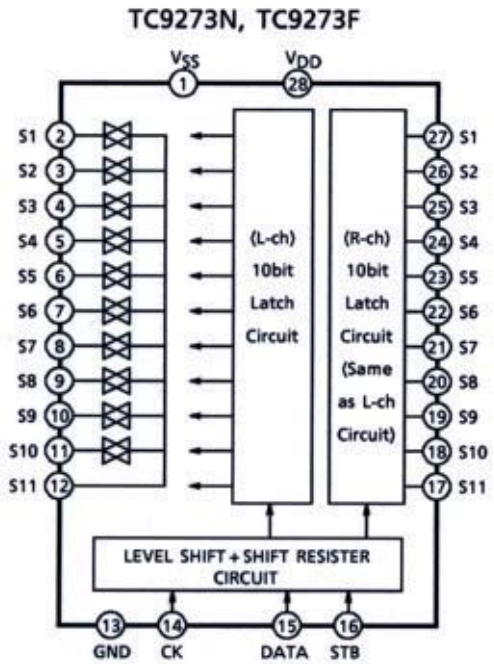
PIN NO.	104	103	102	101	100	99	98	97	96	95	94	93	92	91	90~15	14~6	5	4	3	2	1
CONNECTION	F2	F2	F2	NP	NP	VDD2	VSS	VSS	CLK	DO	DI	BLK	STB	VDD1	NP	NC	NP	NP	F1	F1	F1

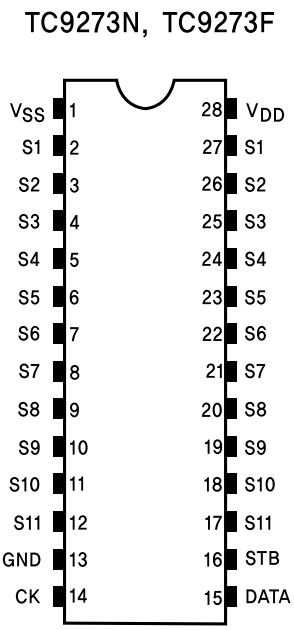
*Notes
Fn : Filament Pin
NP : No Pin
NC : No Connection Pin

* DO(Serial data output) : Be left open if not used.

MODEL : HCA-18LL03
OUTER DIMENSIONS
Rev. ① 18-Feb-2003

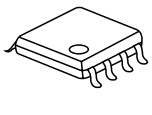
3.PROCESSOR APRT
IC6.IC10



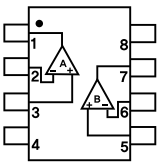


29.NJM2068M

DSP PART	IC100~IC111.IC116.IC117.IC400.IC401.IC402.IC403.IC404
PROCESSORR PART	IC1.IC4.IC7.IC8.IC9.IC11.IC12.IC13.IC15.IC16.IC17.IC20
	IC21.IC23.IC24.IC25.IC26.IC27
MAIN PART	IC22
VIDEO PART	IC901~904



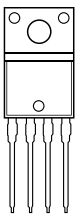
NJM2068M



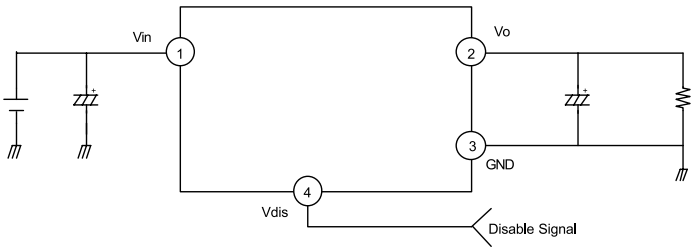
NJM2068D
NJM2068M
NJM2068V

30.KIA78R08API

DSP PART IC601

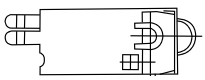


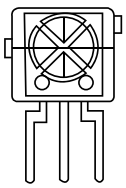
1.Vin 2.VO 3.GND 4.Vdis



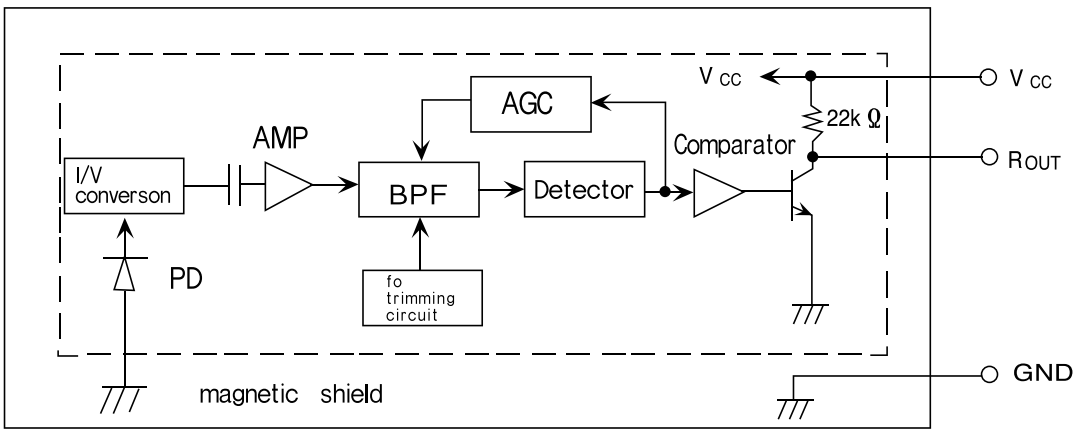
31.RPM6938-RSIP-A3

FRONT PART RM100

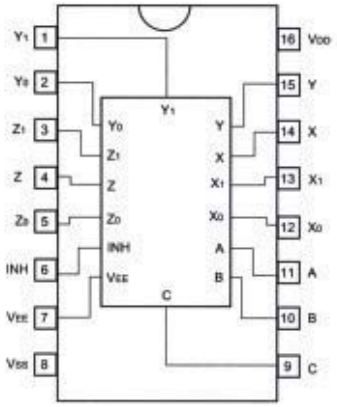


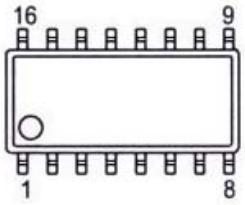


PIN NO.	
①	ROUT
②	GND
③	Vcc

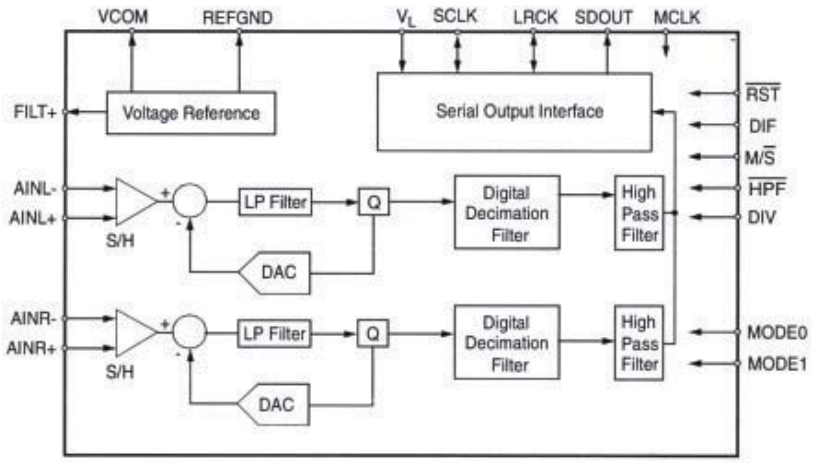


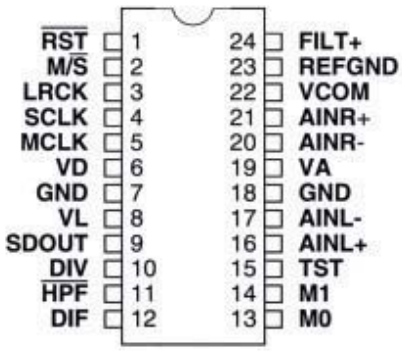
32.BU4053BF
VIDEO PART IC16

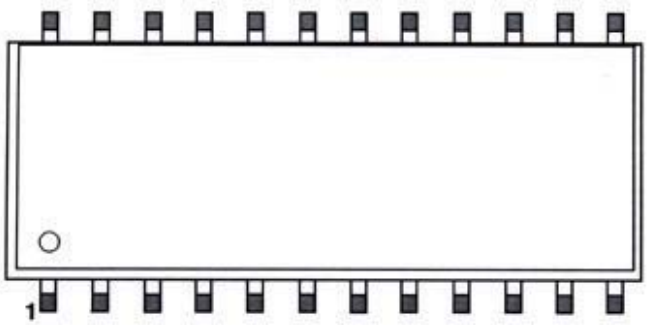




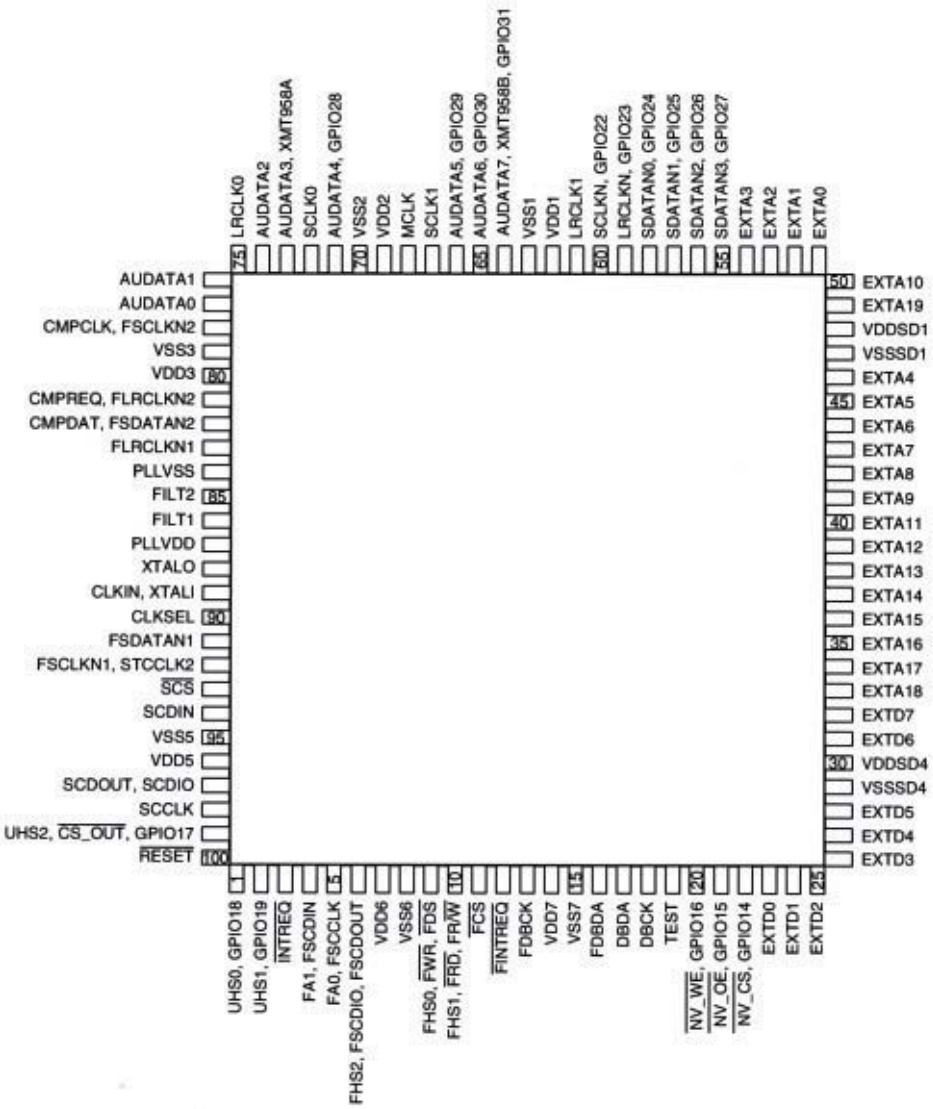
33.CS5361
DSP PART IC112.IC113.IC114.IC115

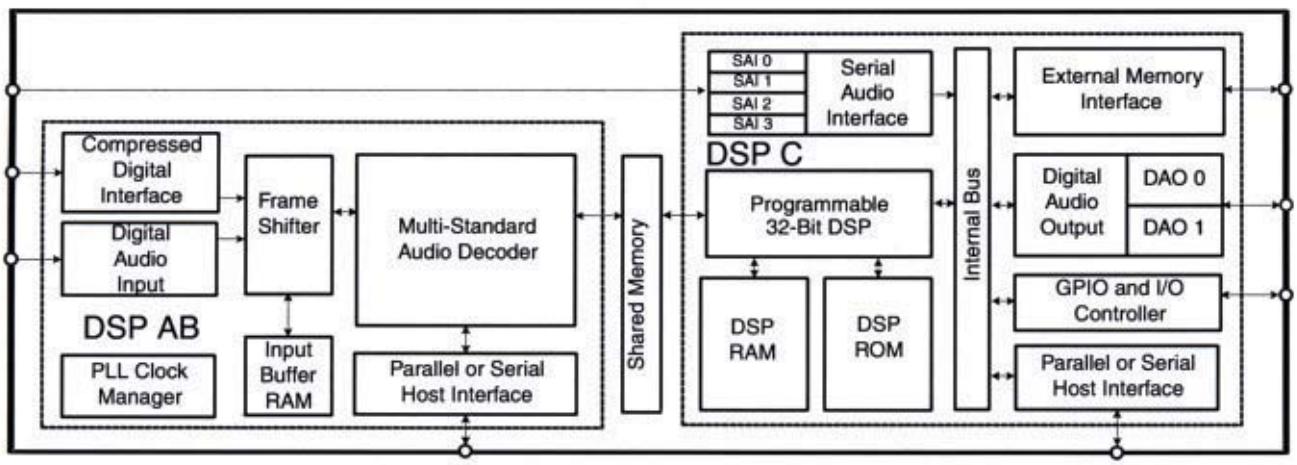






CS49400
DSP PART IC800

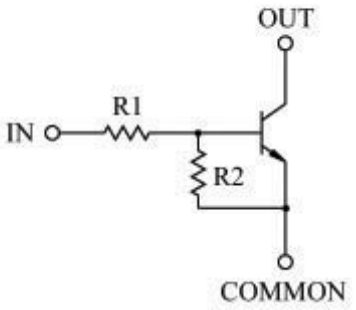


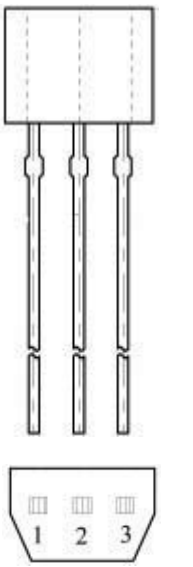


TRANSISTOR BLOCK

1.KRC107M
MAIN PART Q443
VIDEO PART Q400.501.502
DTC114YS
VIDEO PART Q107.110

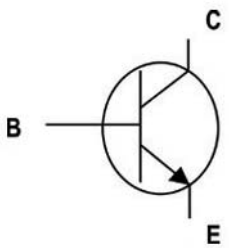
EQUIVALENT CIRCUIT

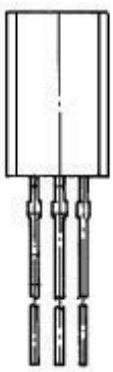


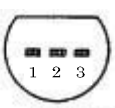


1.EMITTER
2.COLLECTOR
3BASE

2.2SA1145Y
MAIN PART Q309.310.411.412
SURROUND PART Q305.405.505



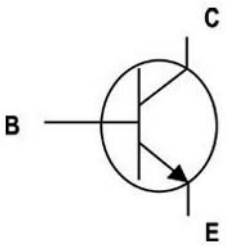


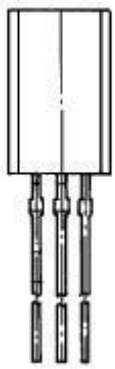


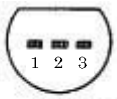
1. EMITTER
2. COLLECTOR
3. BASE

3.KTD1302
MAIN PART Q602

KTC3200BL
MAIN PART Q301~306.313.314.337.338.401.402.403.404.405.406.409.415.416.425
SURROUND PART Q301.302.307.320.401.402.403.407.420.501.502.503.507.520
KTC3198BL
MAIN PART Q307.308.407.408.426.441.606.608
SURROUND PART Q304.404.504
MPSA06N
SUPPLY PART Q101.102
DSP PART Q611
2SC1740S
VIDEO PART Q100.112.114



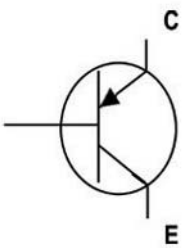


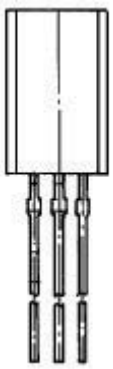


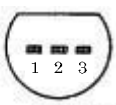
1. EMITTER
2. COLLECTOR
3. BASE

4.KTA1266
MAIN PART Q605.607

KTA1268BL
MAIN PART Q311.312.410.413.414
SURROUND PART Q306.406.506.601
2SA933A
VIDEO PART Q101.104.111
MPSA56Y
FRONT PART Q100.101



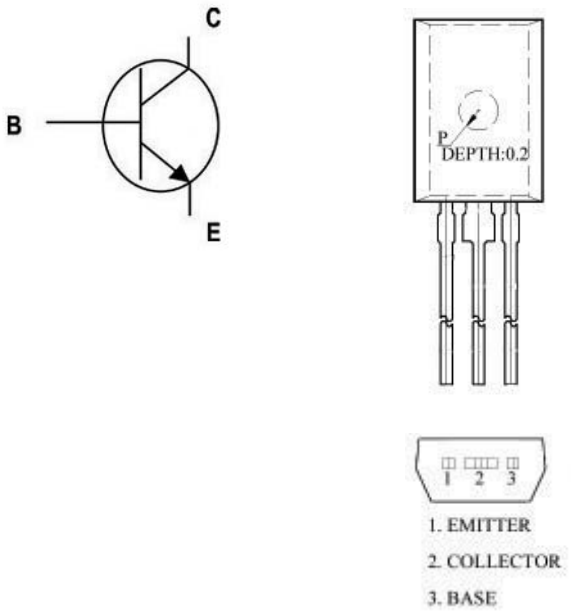




1. EMITTER
2. COLLECTOR
3. BASE

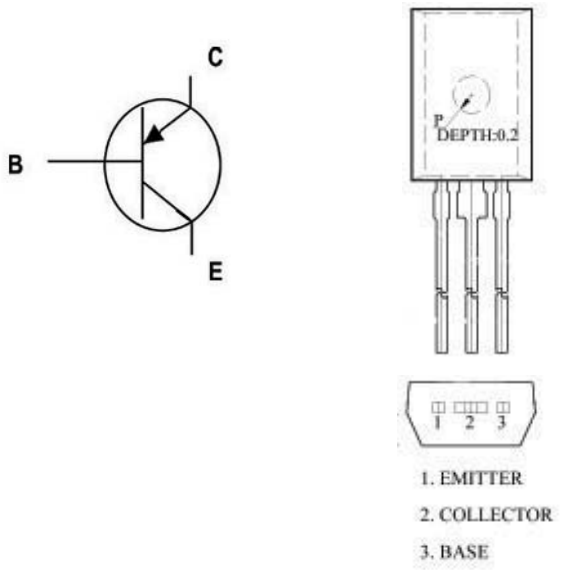
5.KTC3206

MAIN PART	Q317.318.321.322.323.324.419.420.423.424.429.430
SURROUND PART	Q309.312.313.409.412.413.509.512.513

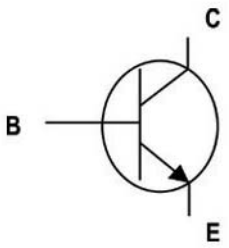


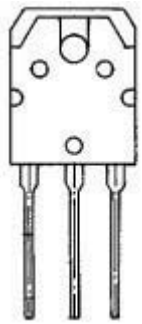
6.KTA1024

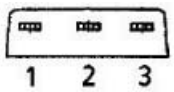
MAIN PART	Q315.316.319.320.327.328.417.418.421.422.431.432.442
SURROUND PART	Q308.311.315.408.411.415.508.511.515



7.2SC5358
MAIN PART Q333.34.437.438
SURROUND PART Q318.418.518

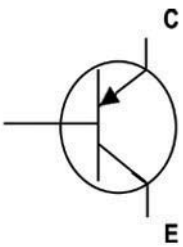


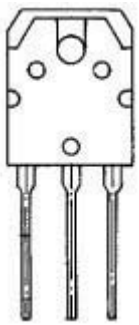


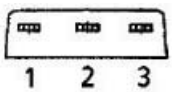


1. BASE
2. COLLECTOR (HEAT SINK)
3. EMITTER

8.2SA1986
MAIN PART Q335.336.439.440
SURROUND PART Q319.419.519

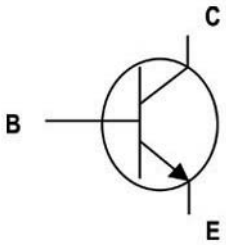


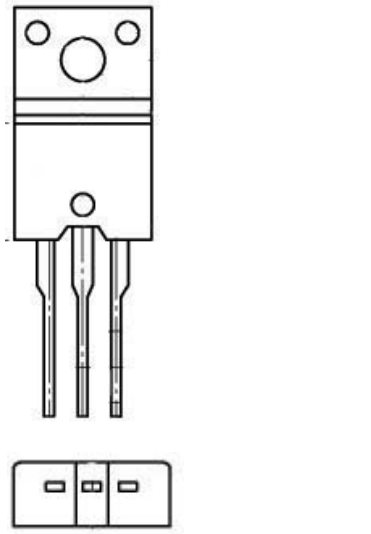




1. BASE
2. COLLECTOR (HEAT SINK)
3. EMITTER

9.2SC4883
MAIN PART Q331.332.435.436
SURROUND PART Q317.417.517

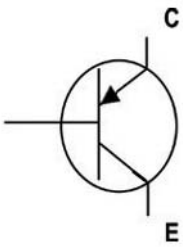


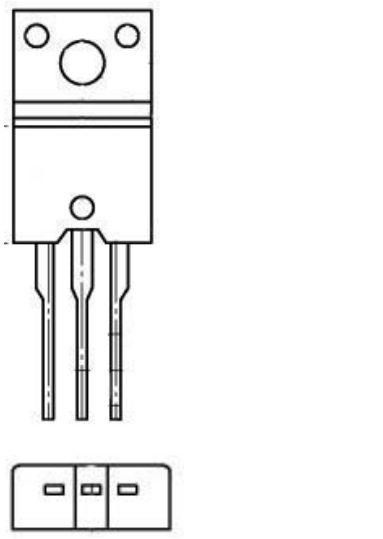


1 2 3

1. BASE
2. COLLECTOR (HEAT SINK)
3. EMITTER

10.2SA1859
MAIN PART Q329.330.433.434
SURROUND PART Q316.416.516

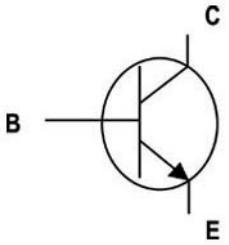


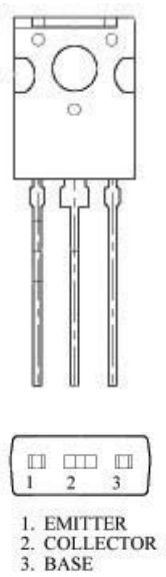


1 2 3

1. BASE
2. COLLECTOR (HEAT SINK)
3. EMITTER

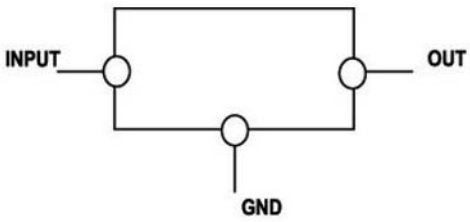
11.2SC4137
MAIN PART Q701.702.703.704
SURROUND PART Q314.414.514

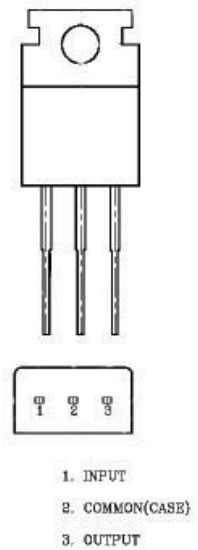




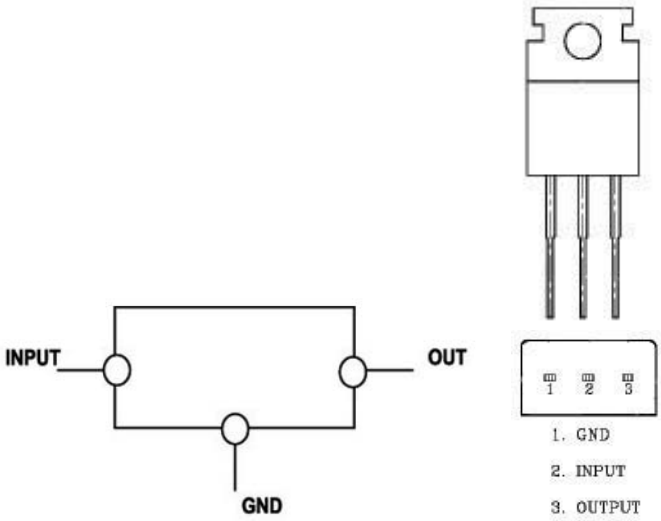
12.KIA7815
MAIN PART IC51
KIA7812
MAIN PART IC59
KIA7824
MAIN PART IC54
KIA806
VIDEO PART IC18

KIA7805
MAIN PART IC55
SUPPLY PART IC11

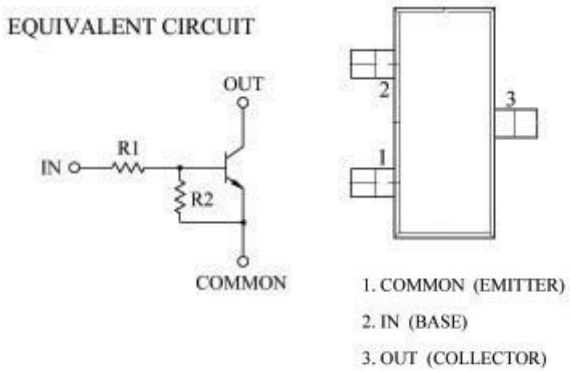




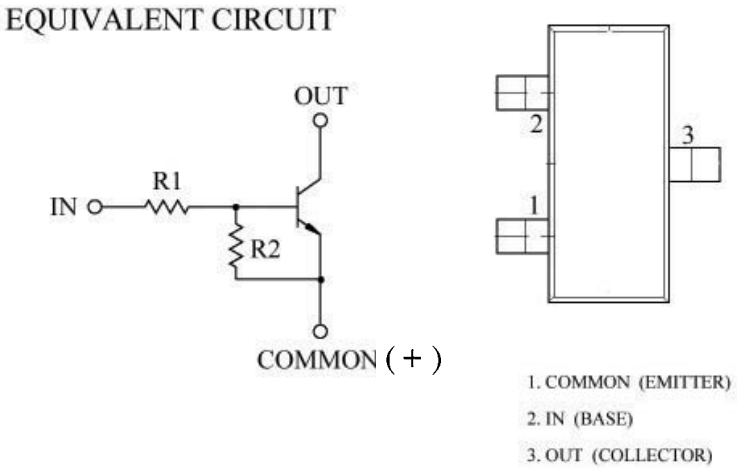
13.KIA7915
MAIN PART IC52
KIA7905
MAIN PART IC56



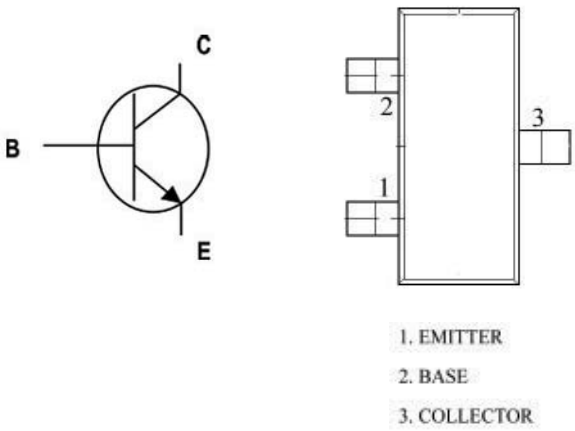
14.DTC114Y
DSP PART Q600.601.604.605.606.607.608.609.612.613.700
FRONT PART Q102.103.801.802.803.804.805
PROCESSOR PART Q54
VIDEO PART Q105.106.113



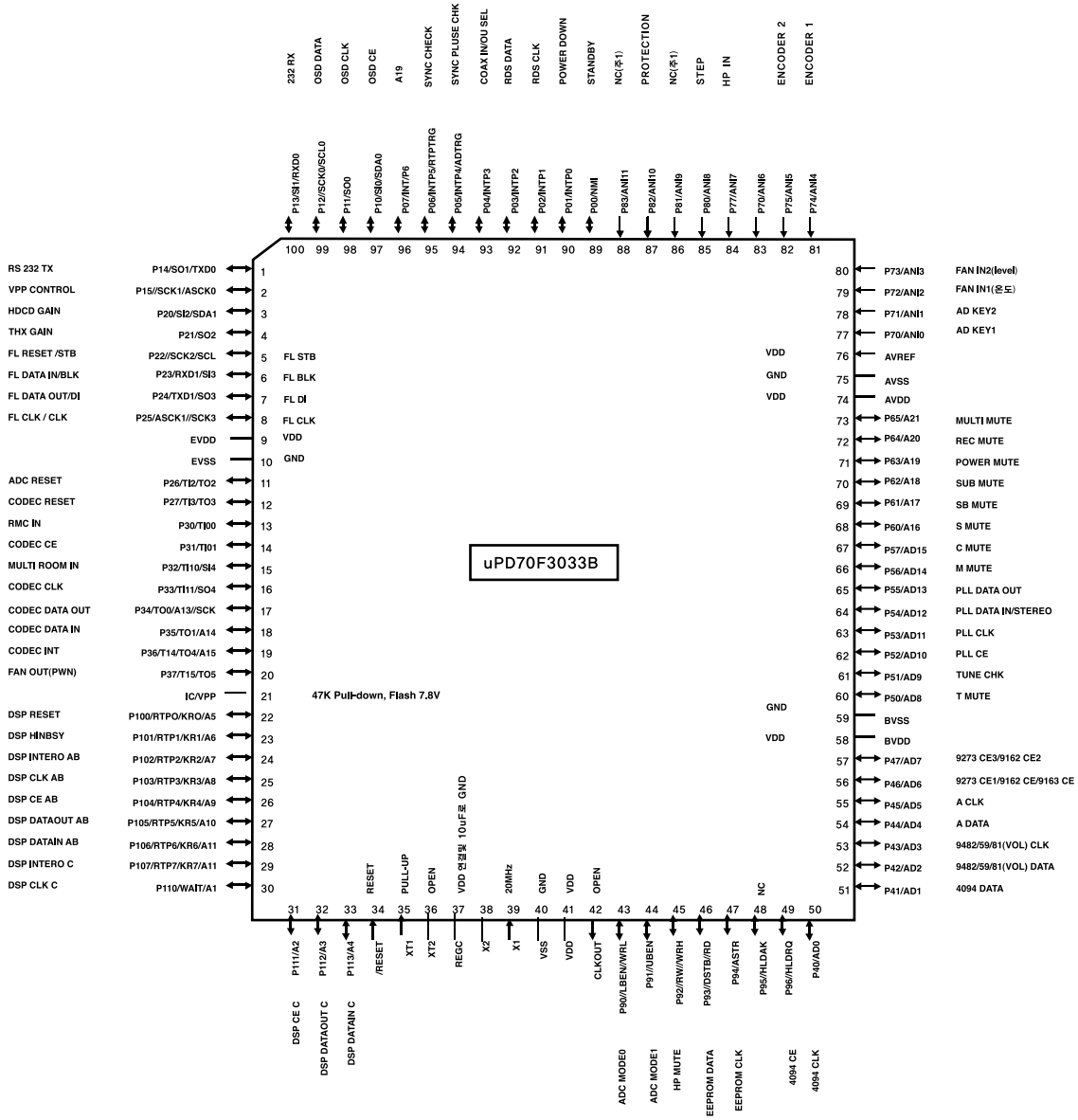
15.DTA114Y
DSP PART Q402.403
PROCESSOR PART Q20.3.13.14.17.23.25.32.34.35.37.41.43.50.52
VIDEO PART Q102.103



16.KTD1304N
DSP PART Q400.401
FRONT PART Q800
PROCESSOR PART Q4.7.8.9.10.11.12.15.16.51.53.58.59

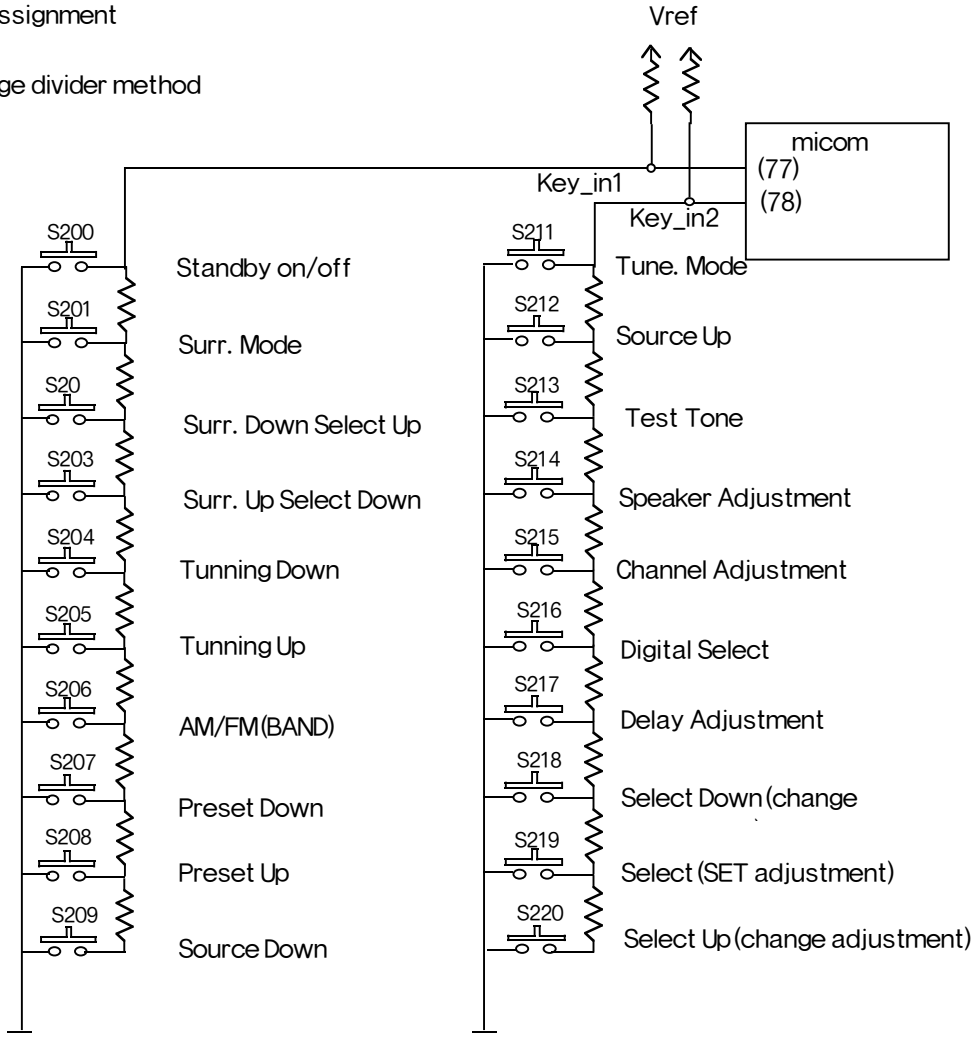


Upd70F3033BGF-3BA PORT DEFINE FOR AVR630



1. Key assignment

- voltage divider method



2. Define Option

1) TUNER OPTION:

HIGH(PULL UP - R168(10K)) : RDS
LOW(PULL DPWN - R654(10K)) : NO RDS

2) NTSC/PAL:

STANDBY OFF--> SELECT UP(FOR 2 SEC) --> SELECT NTSC/PAL BY TOGGLE SELECT UP KEY

---> SET NTSC OR PAL BY SET KEY

uPD70F3033B (V850/SB1)
PORT ASSIGNMENT

AVR540/340

PORT ASSIGNMENT

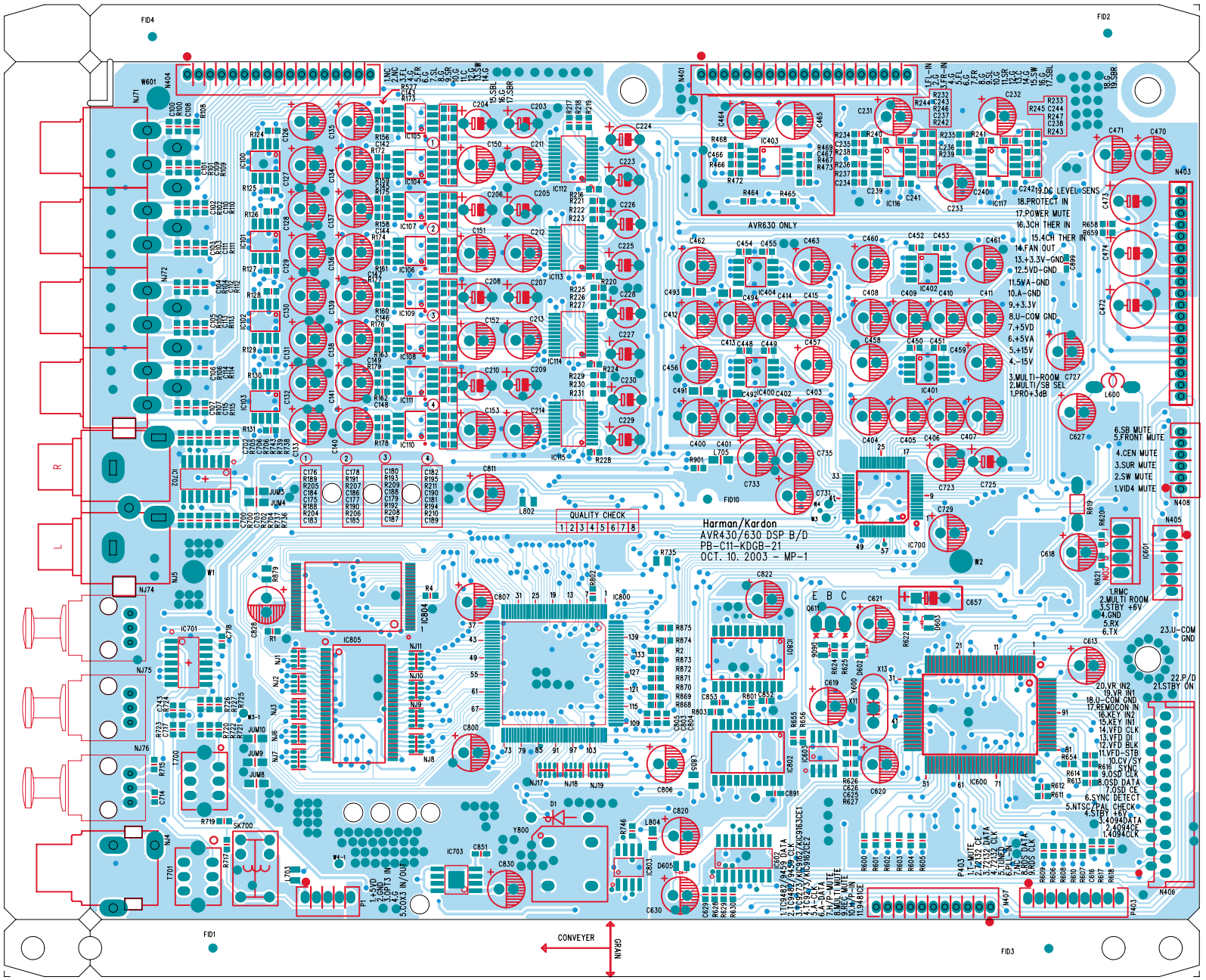
PIN	DESCRIPTION	RECEVIER NAME	IN/OUT	FUNCTION
1	P14/SO1/TXD0	RS-232 TX	TX	CPU FLASH UPGRADE UART TX PORT
2	P15/SCK1/ASCK0	VPP_CONTROL	OUT	Flash Upgrade VPP Control Pin
3	P20/SI2/SDA1	HDCD GAIN	OUT	HDCD GAIN (DSP)
4	P21/SO2	THX GAIN	OUT	THX GAIN (DSP)
5	P22/SCK2/SCL1	FIP RST / FL STB	OUT	FIP DRIVER IC RESET / FL STROBE
6	P23/RXD1/SI3	FIP SI / FL BLK	SI	FIP DRIVER IC DATA IN / FL BLANK
7	P24/TXD1/SO3	FIP SO / FL DI	SO	FIP DRIVER IC DATA OUT / FL DI
8	P25/ASCK1/SCK3	FIP CLK / FL CLK	SCK	FIP DRIVER IC CLOCK OUT (NEC CPU MASTER) / FL CLK
9	EVDD	EVDD	VDD	VDD
10	EVSS	EVSS	VDD	GND
11	P26/TI2/TO2	ADC RESET	OUT	ADC RESET (DSP)
12	P27/TI3/TO3	CODEC_RESET	OUT	CODEC RESET (DSP)
13	P30/TI00	RMC_IN	CAPTURE	REMOCON IN
14	P31/TI01	CODEC_CE	OUT	CODEC CHIP ENABLE (DSP)
15	P32/T110/S14	RMC_MULTI	CAPTURE	MULTI ROOM REMOCON
16	P33/TI11/SO4	CODEC CLK	OUT	CODEC CLK (DSP)
17	P34/TO0/SCK4	CODEC_DATA_OUT	OUT	CODEC DATA_OUT (DSP)
18	P35/TO1	CODEC_DATA_IN	IN	CODEC DSP_IN (DSP)
19	P36/TI4/TO4	CODEC_INT	IN	CODEC INT (DSP)
20	P37/TI5/TO5	FAN OUT	OUT	FAN OUT CONTROL (PWM)
21	IC/VPP	VPP	IN	47K Pull_Down, FLASH WRITE 7.8V
22	P100/RTP0/KR0	DSP_RESET	OUT	CS49400 RESET (DSP)
23	P101/RTP1/KR1	DSP_HINBSY	IN	CS49400 HINBSY (DSP)
24	P102/RTP2/KR2	DSP_INTERQ_AB	IN	CS49400 INTERQ_AB (DSP)
25	P103/RTP3/KR3	DSP_CLK_AB	OUT	CS49400 CLK AB
26	P104/RTP4/KR4	DSP_CE_AB	OUT	CS49400 CE AB
27	P105/RTP5/KR5	DSP_DATA_OUT_AB	OUT	CS49400 DATA OUT (DSP)
28	P106/RTP6/KR6	DSP_DATA_IN_AB	IN/OUT	CS49400 DATA IN (DSP)
29	P107/RTP7/KR7	DSP_INTERQ_C	IN	CS49400 INTERQ C (DSP)
30	P110/WAIT	DSP_CLK_C	OUT	CS49400 CLK C (DSP)
31	P111	DSP_CE_C	OUT	CS49400 CE C (DSP)
32	P112	DSP_DATA_OUT_C	OUT	CS49400 DATA OUT C (DSP)
33	P113	DSP_DATA_IN_C	IN/OUT	CS49400 DATA IN C (DSP)
34	/RESET	RESET	IN	LOW ACTIVE
35	XT1	XT1	IN	Pull_Down
36	XT2	XT2	OUT	OPEN
37	REGC	REGC	VDD	VDD
38	X2	Fx_OUT	OUT	20.00MHz RESONATOR
39	X1	Fx_IN	IN	20.00MHz RESONATOR
40	VSS	VSS	VDD	GND
41	VDD	VDD	VDD	5V
42	CLKOUT	CLKOUT	OUT	OPEN (STOP MODE: LOW)
43	P90/LBEN/WRL	ADC MODE 0	OUT	ADC MODE 0 (DSP)
44	P91/UBEN	ADC MODE 1	OUT	ADC MODE 1 (DSP)
45	P92/RW/WRH	HP MUTE	OUT	HEADPHONE MUTE
46	P93/DSTB/RD	EEPROM DATA	OUT	EEPROM DATA
47	P94/ASTB	EEPROM CLK	OUT	EEPROM CLK
48	P95/HLDAK	VOL IC CE	OUT	TC9481/TC9482/TC9459 CE
49	P96/HLDRQ	4094 CE	OUT	4094 CHIP ENABLE

uPD70F3033B (V850/SB1)
PORT ASSIGNMENT

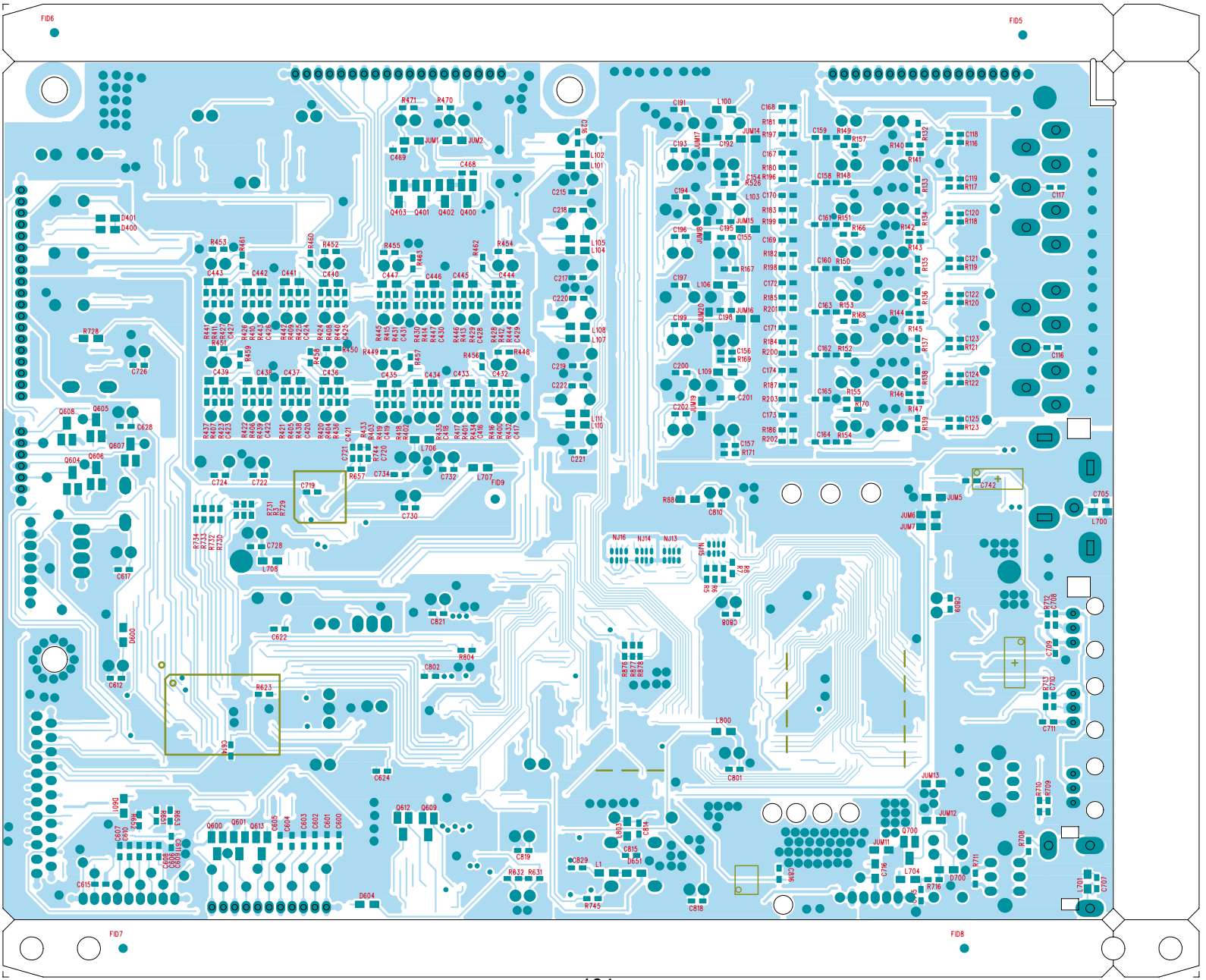
AVR540/340

50	P40	4094 CLK	OUT	4094 CLK
PIN	DESCRIPTION	RECEVIER NAME	IN/OUT	FUNCTION
51	P41	4094 DATA	OUT	4094 DATA
52	P42	9482/59/81 DATA	OUT	9482/59/81 VOL IC DATA
53	P43	9482/59/81 CLK	OUT	9482/59/81 VOL IC CLK
54	P44	A DATA	OUT	9273_1, 9273_3, 9162, 9162_2, 9163 DATA
55	P45	A CLK	OUT	9273_1, 9273_3, 9162, 9162_2, 9163 CLK
56	P46	9273 CE1	OUT	9273_1, 9162, 9163 CHIP ENABLE
57	P47	9273_CE3	OUT	9273_3, 9162_2 CHIP ENABLE
58	BVDD	BVDD	VDD	VDD
59	BVSS	BVSS	VDD	GND
60	P50	T_MUTE	OUT	TUNER MUTE OUT
61	P51	TUNED	IN	TUNED CHECK IN
62	P52	T_CE	OUT	TUNER PLL IC(LC72131) CHIP ENABLE
63	P53	T_CLOCK	OUT	TUNER PLL IC(LC72131) CLOCK
64	P54	T_DATA IN/STEREO	IN	TUNER PLL IC(LC72131) DATA IN / STEREO CHECK
65	P55	T_DATA OUT	OUT	TUNER PLL IC(LC72131) DATA OUT
66	P56	MMUTE	OUT	FRONT SPEAKER MUTE
67	P57	CMUTE	OUT	CENTER SPEAKER MUTE
68	P60	SMUTE	OUT	SURROUND SPAKER MUTE
69	P61	SBMUTE	OUT	SURR BACK SPEAKER MUTE
70	P62	SUBMUTE	OUT	SUB WOOFER MUTE
71	P63	PMUTE	OUT	POWER MUTE
72	P64	RECMUTE	OUT	REC MUTE
73	P65	MULTI MUTE	OUT	MULTI ROOM MUTE
74	AVDD	AVDD	VDD	VDD
75	AVSS	AVSS	VDD	GND
76	AVREF	AVREF	VDD	VDD (AD KEY PULL UP VDD)
77	P70/ANI0	AD KEY1	ADIN	A/D KEY INPUT1
78	P71/ANI1	AD KEY2	ADIN	A/D KEY INPUT2
79	P72/ANI2	FAN IN1	ADIN	TEMPERATURE SENSOR INPUT
80	P73/ANI3	FAN IN2	ADIN	LEVEL SENSOR INPUT
81	P74/ANI4	ENCODE1	IN	VOLUME ENCODER INPUT 1
82	P75/ANI5	ENCODE2	IN	VOLUME ENCODER INPUT 2
83	P76/ANI6	yc/comp check	ADIN	Y/C,COMPO jack check in
84	P77/ANI7	HP_IN	IN	HEADPHONE INPUT
85	P80/ANI8	STEP	IN	TUNER FREQ OPTION
86	P81/ANI9	NTSC/PAL SEL	IN	NC
87	P82/ANI10	PROTECTION	IN	PROTECTION IN
88	P83/ANI11	MODEL	IN	NC
89	P00/NMI	STANDBY	OUT	MAIN POWER ON/OFF
90	P01/INTP0	POWER DOWN	INTP0	POWER DOWN CHECK & WAKE UP : RISING EDGE
91	P02/INTP1	RDS_CLOCK	INTP1	RDS_CLOCK (INTERRUPT) : FALLING EDGE
92	P03/INTP2	RDS_DATA	IN	RDS_DATA
93	P04/INTP3	COAX_INOUT SEL	OUT	COAX IN/OUT SELECT
94	P05/INTP4/ADTRG	SYNC pluse check	IN	SYNC PLUSE CHECK (OSD IC 7PIN)
95	P06/INTP5/RTPTRG	SYNC CHECK	IN	SYNC CHECK (OSD IC 29PIN)
96	P07/INTP6	A19	OUT	A19
97	P10/SI0	OSD CE	OUT	OSD CHIP ENABLE
98	P11/SO0	OSD CLK	OUT	OSD CLK
99	P12/SCK0	OSD DATA	OUT	OSD DATA
100	P13/SI1/RXD0	RS-232 RX	RX	CPU FLASH UPGRADE UART RX PORT

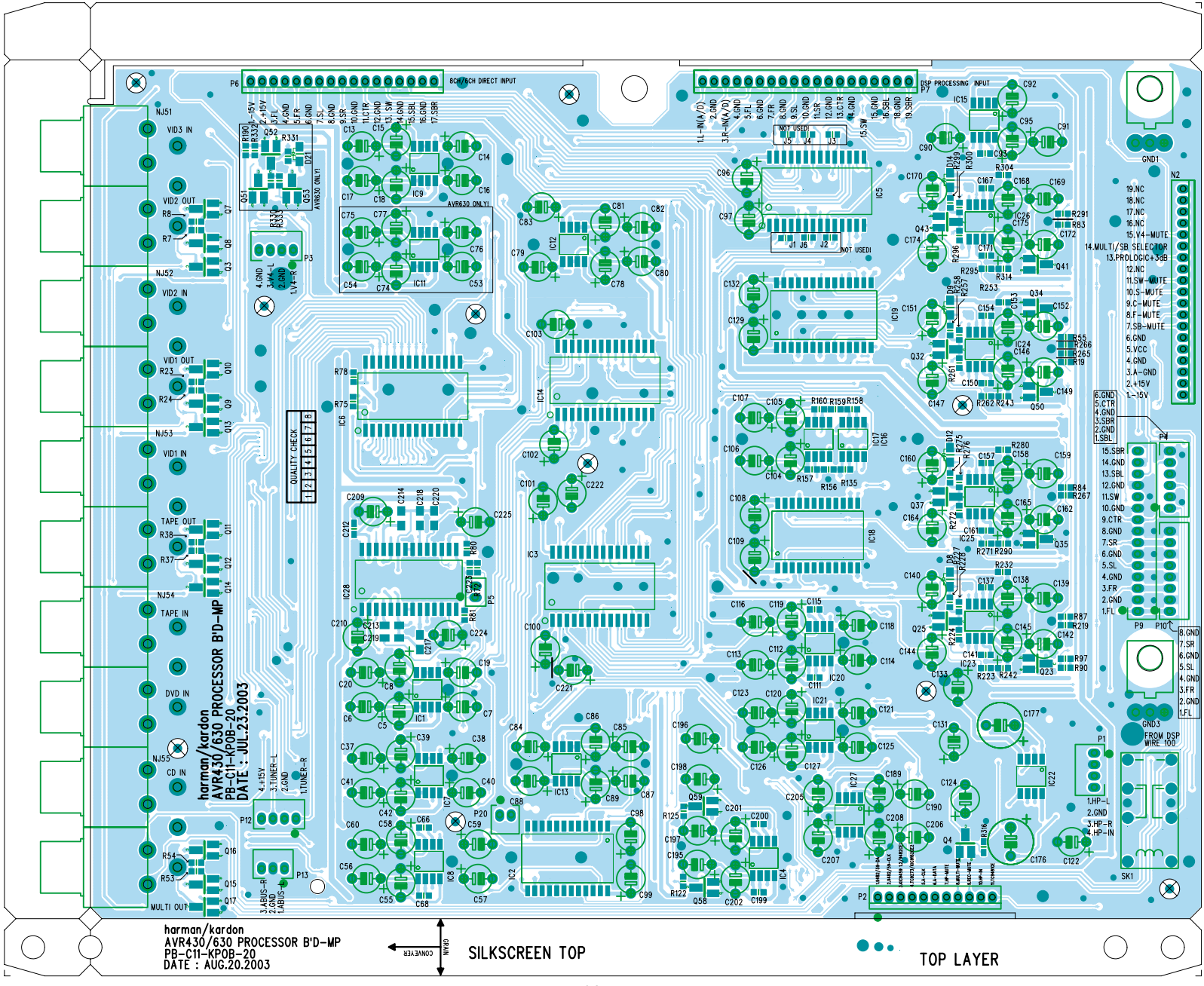
DSP BOARD (TOP VIEW)



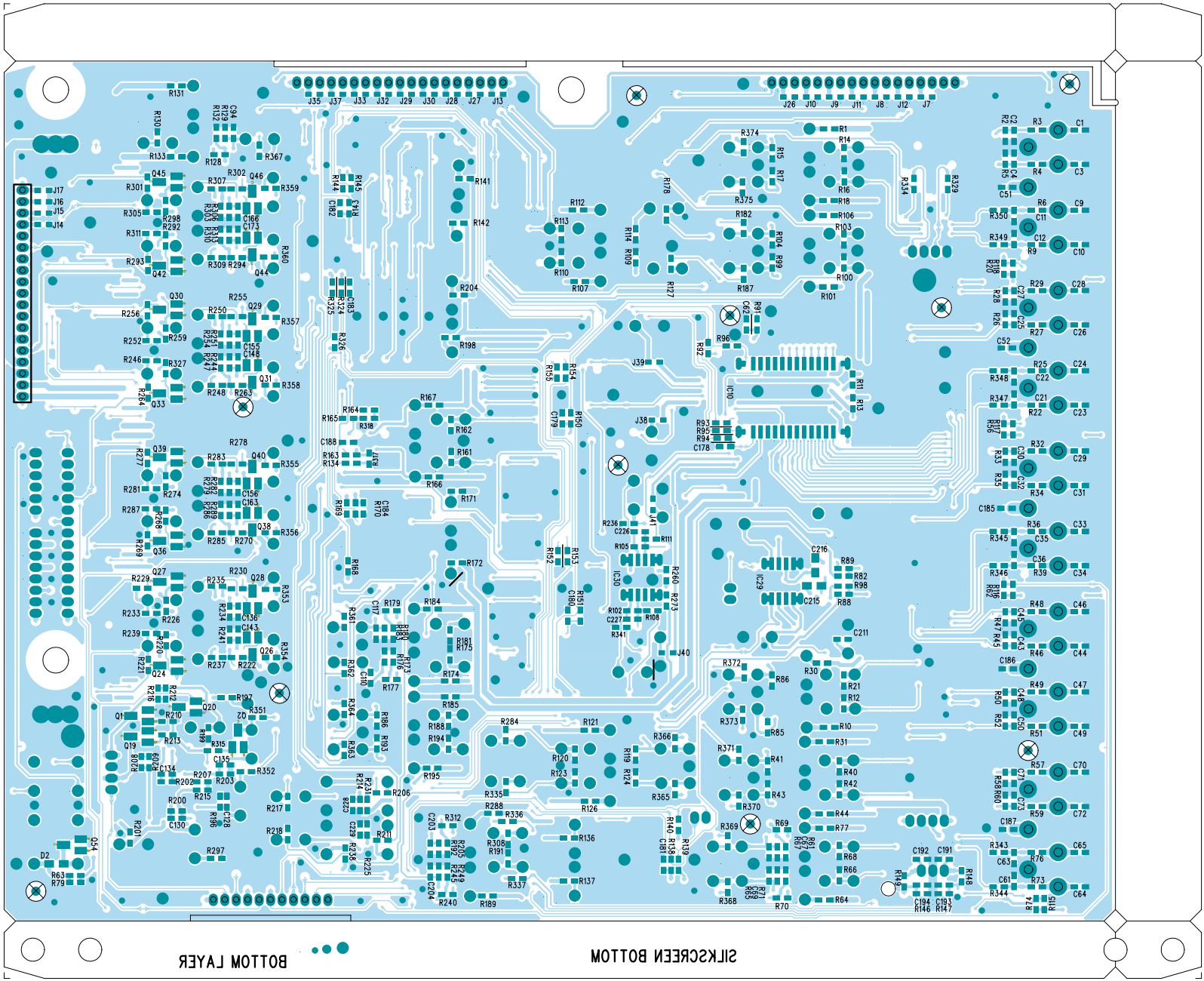
DSP BOARD (BOTTOM VIEW)



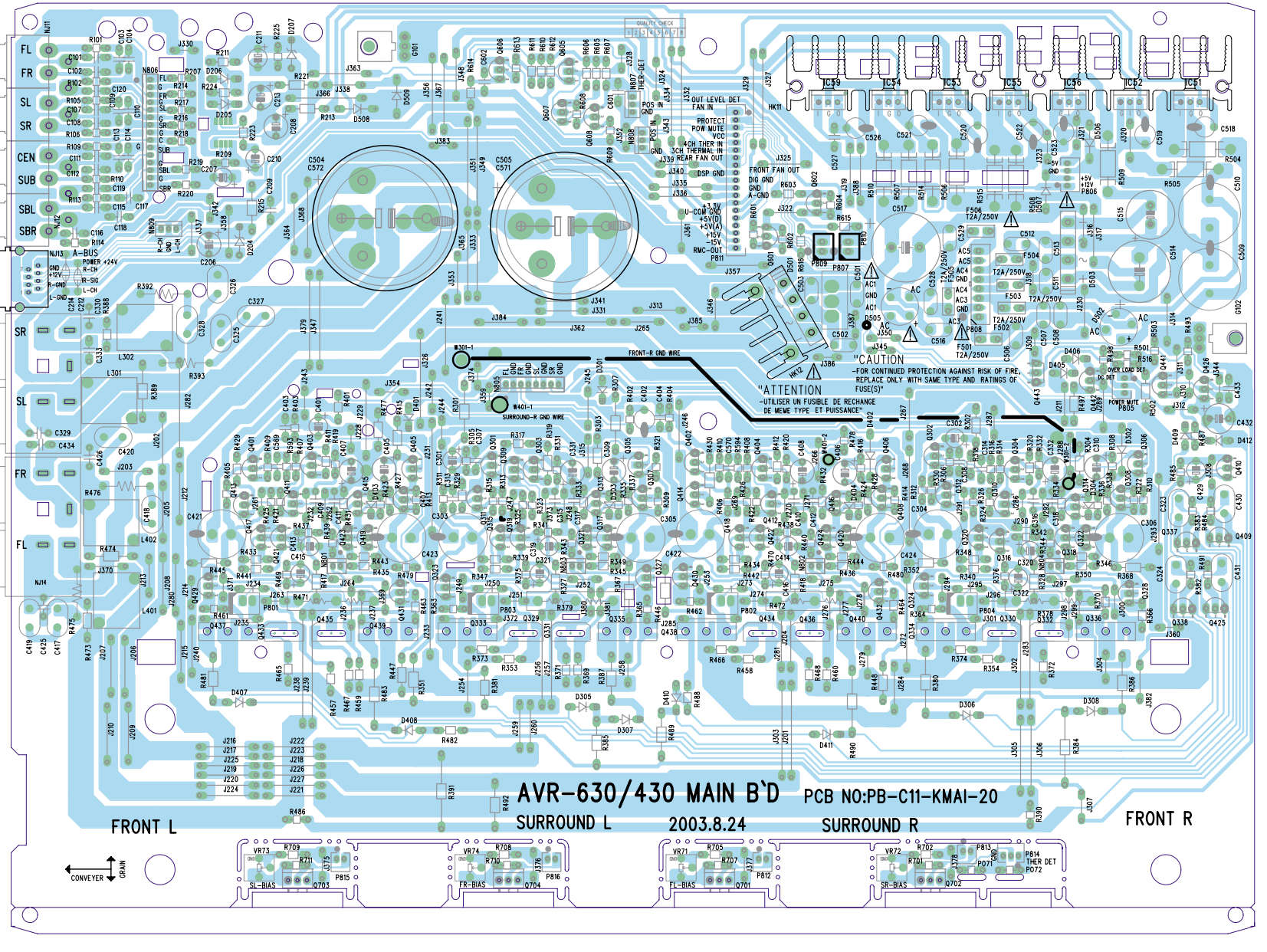
PROCESSOR BOARD (TOP VIEW)



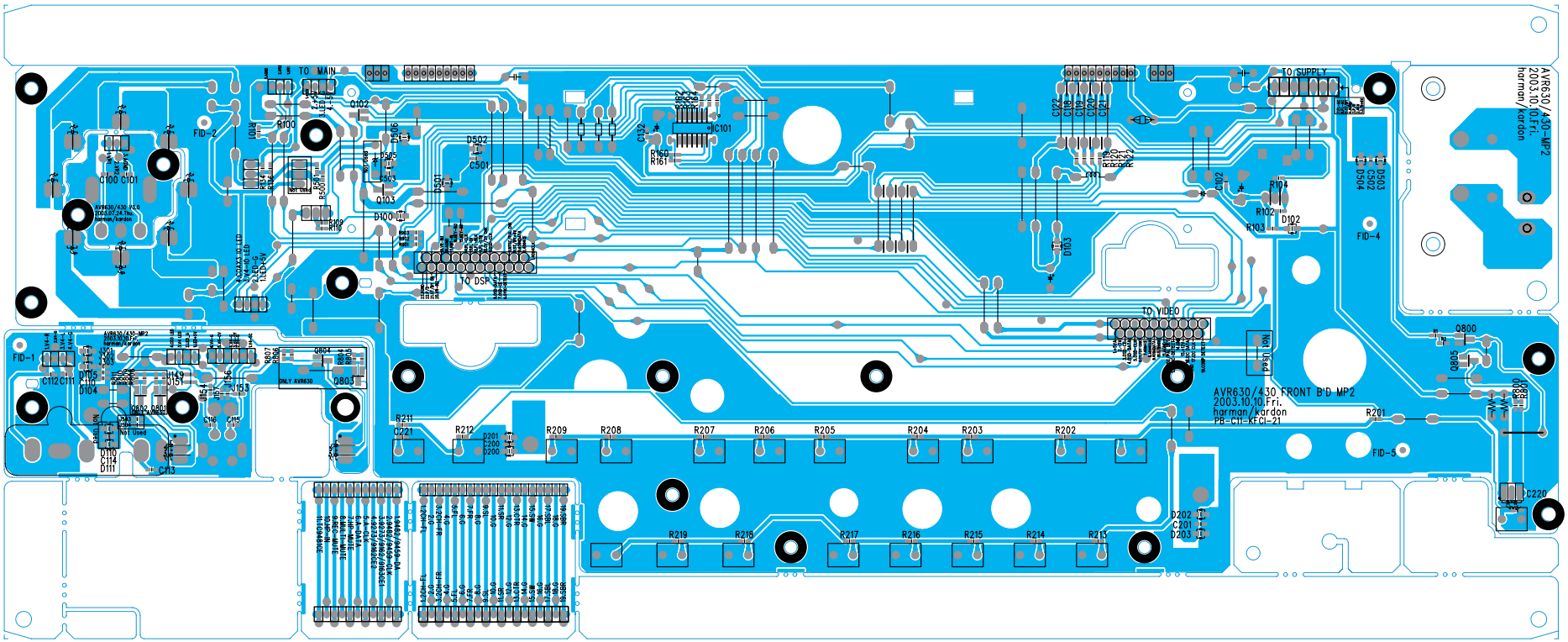
PROCESSOR BOARD (BOTTOM VIEW)



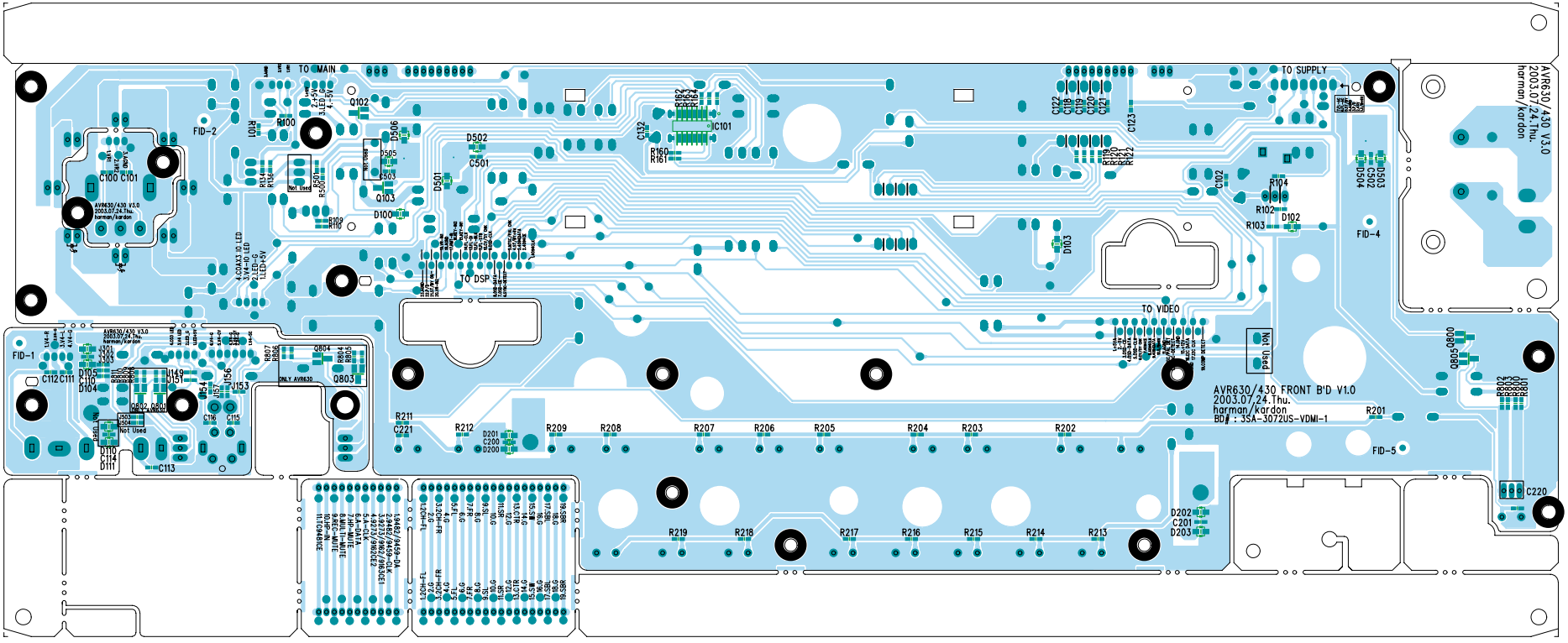
MAIN AMP BOARD



FRONT BOARD (BOTTOM VIEW)

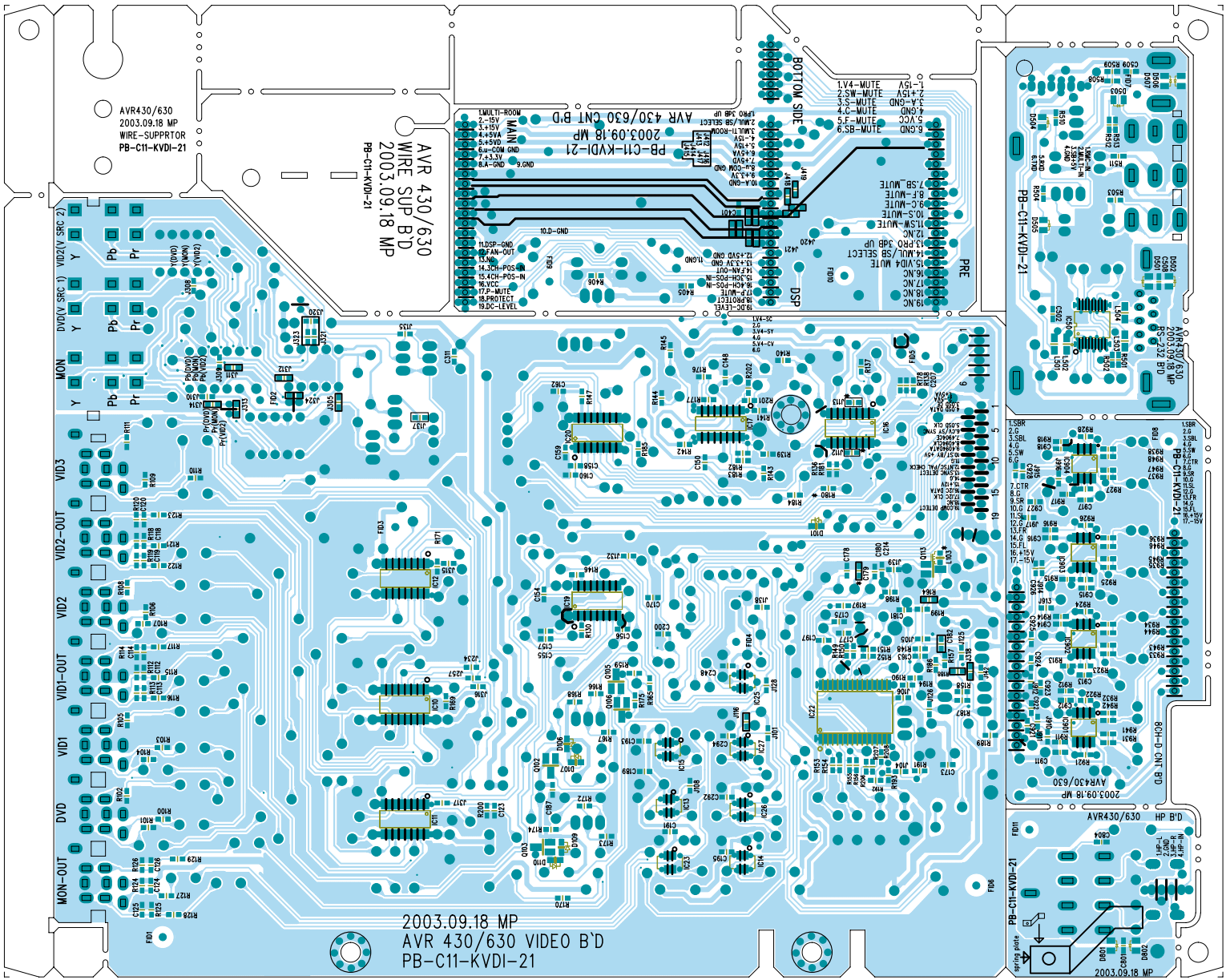


FRONT BOARD (TOP VIEW)

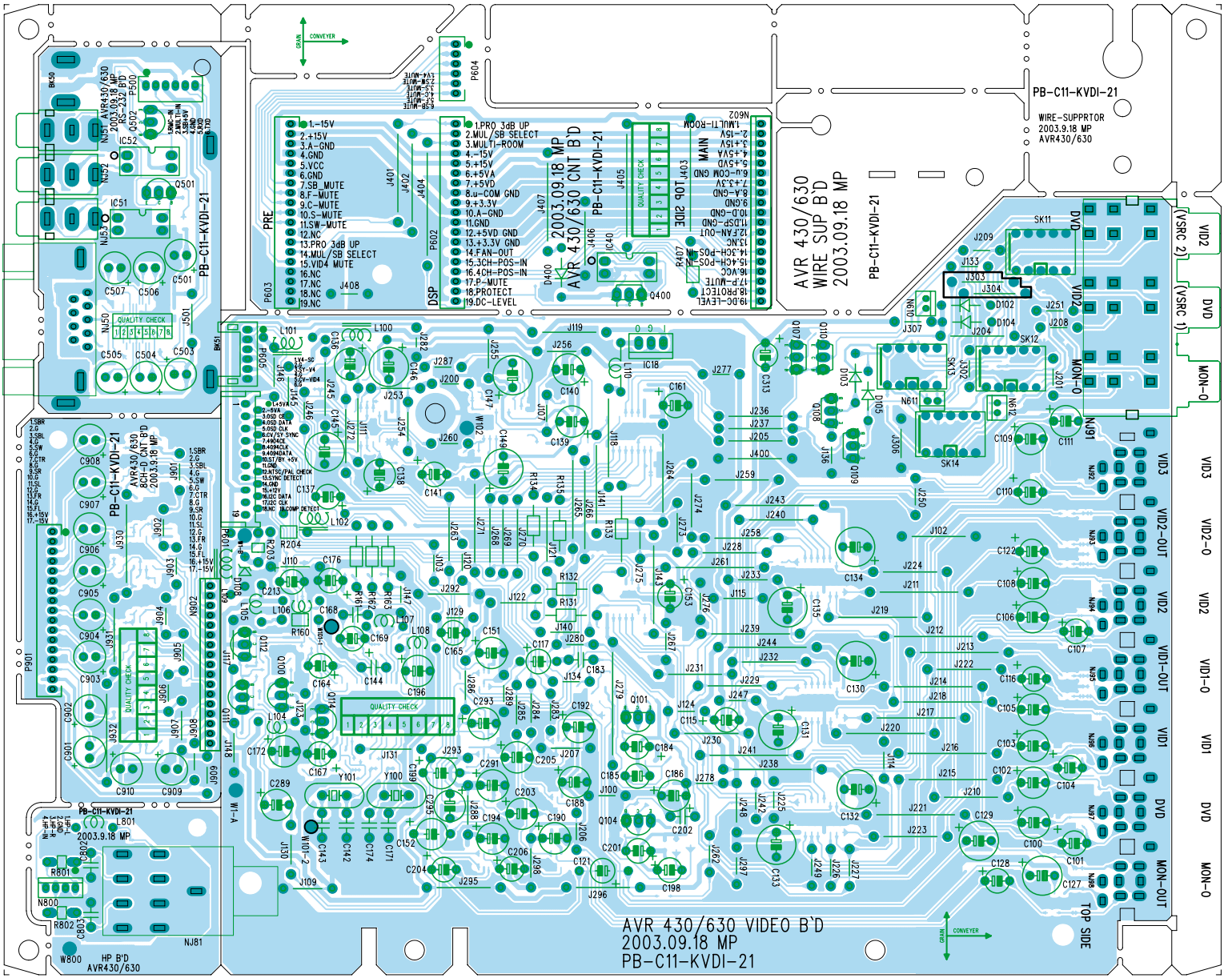


AVR630-FRONT FTMS-0723. - Wed Oct 08 19:00:25 2003

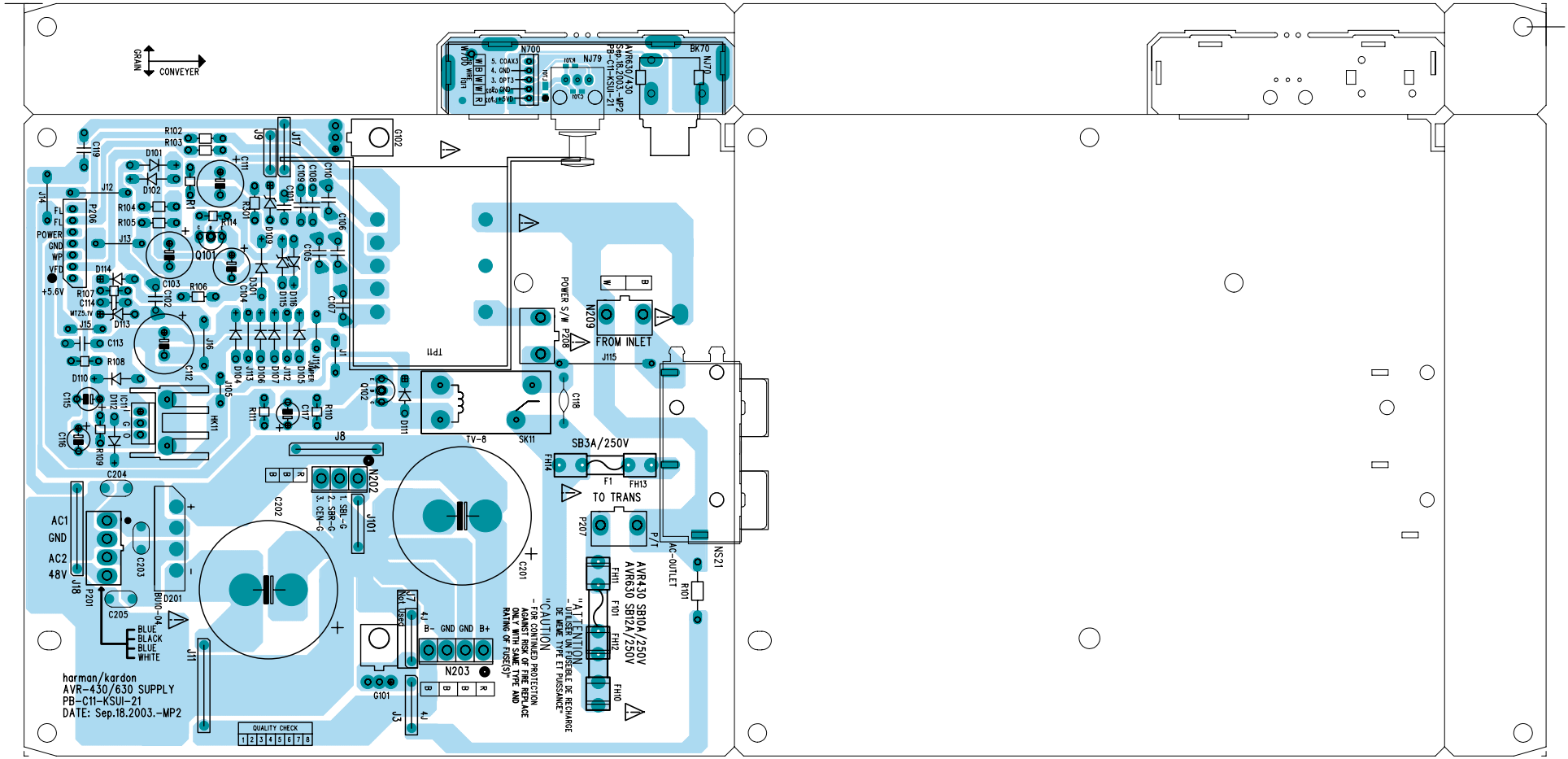
VIDEO BOARD (BOTTOM VIEW)



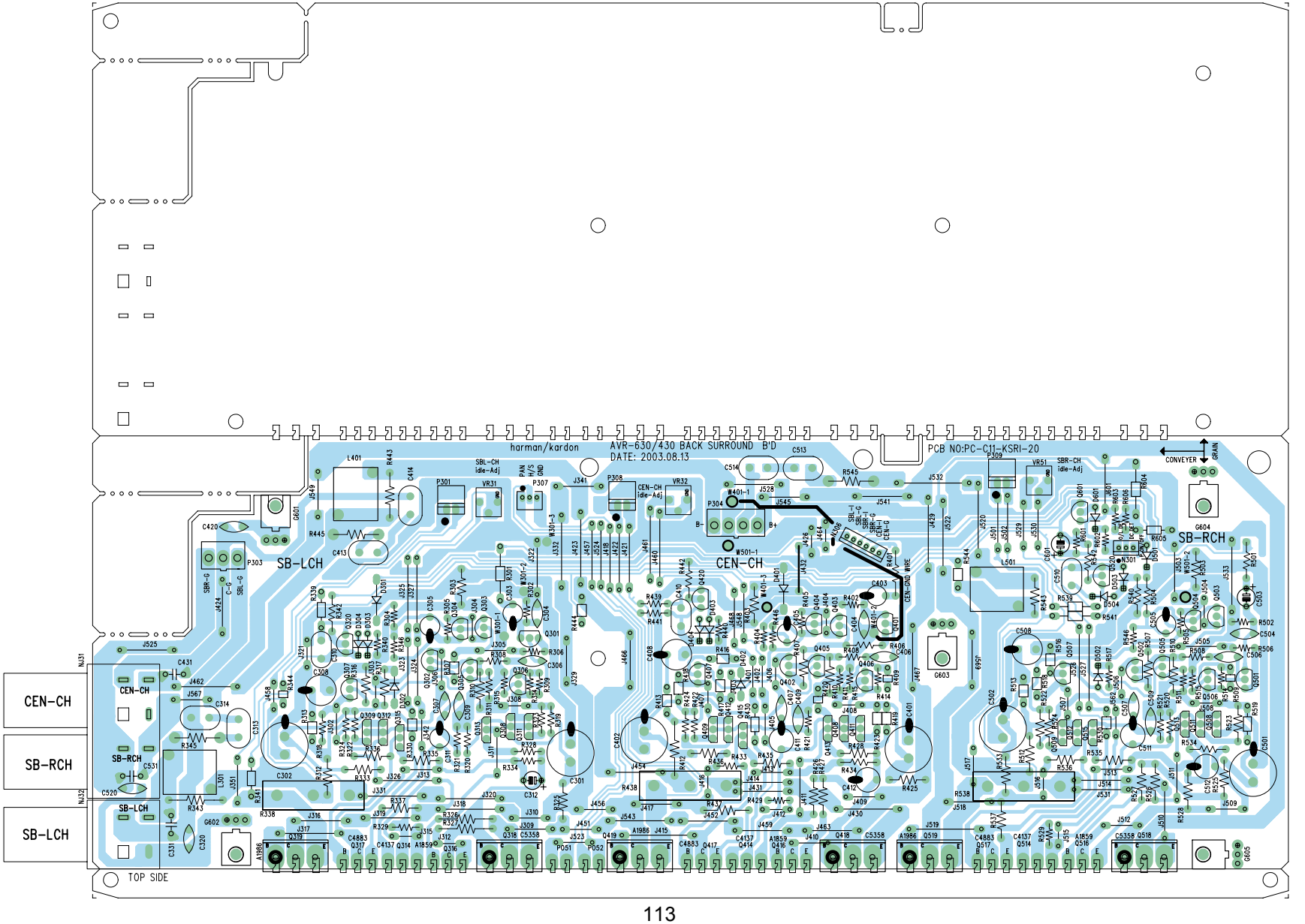
VIDEO BOARD (TOP VIEW)



SUPPLY BOARD



BACK SURROUND BOARD



SCHEMATIC DIAGRAM

harman/kardon
AVR430/630DSP#2

REVISION RECORD			
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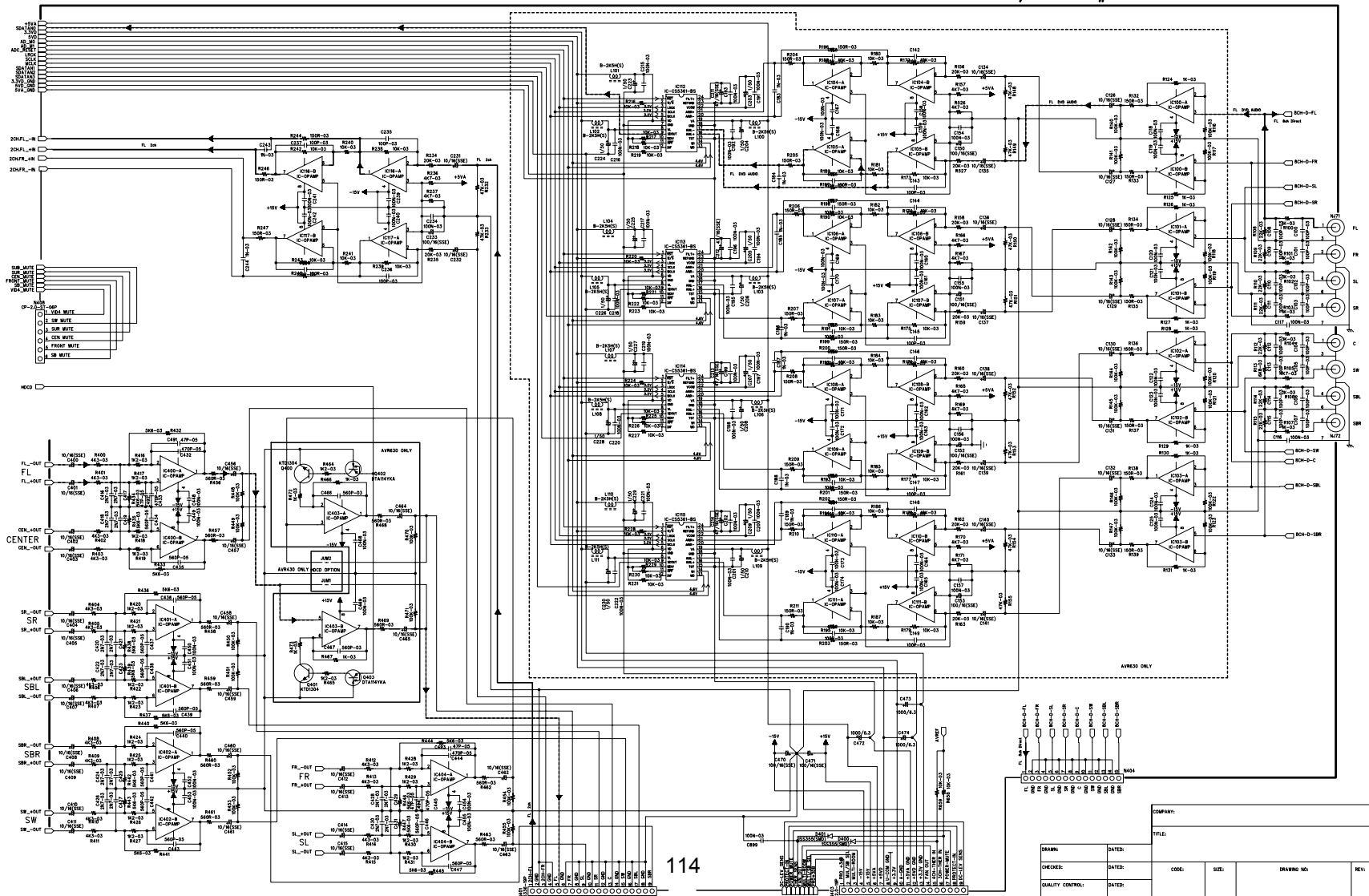

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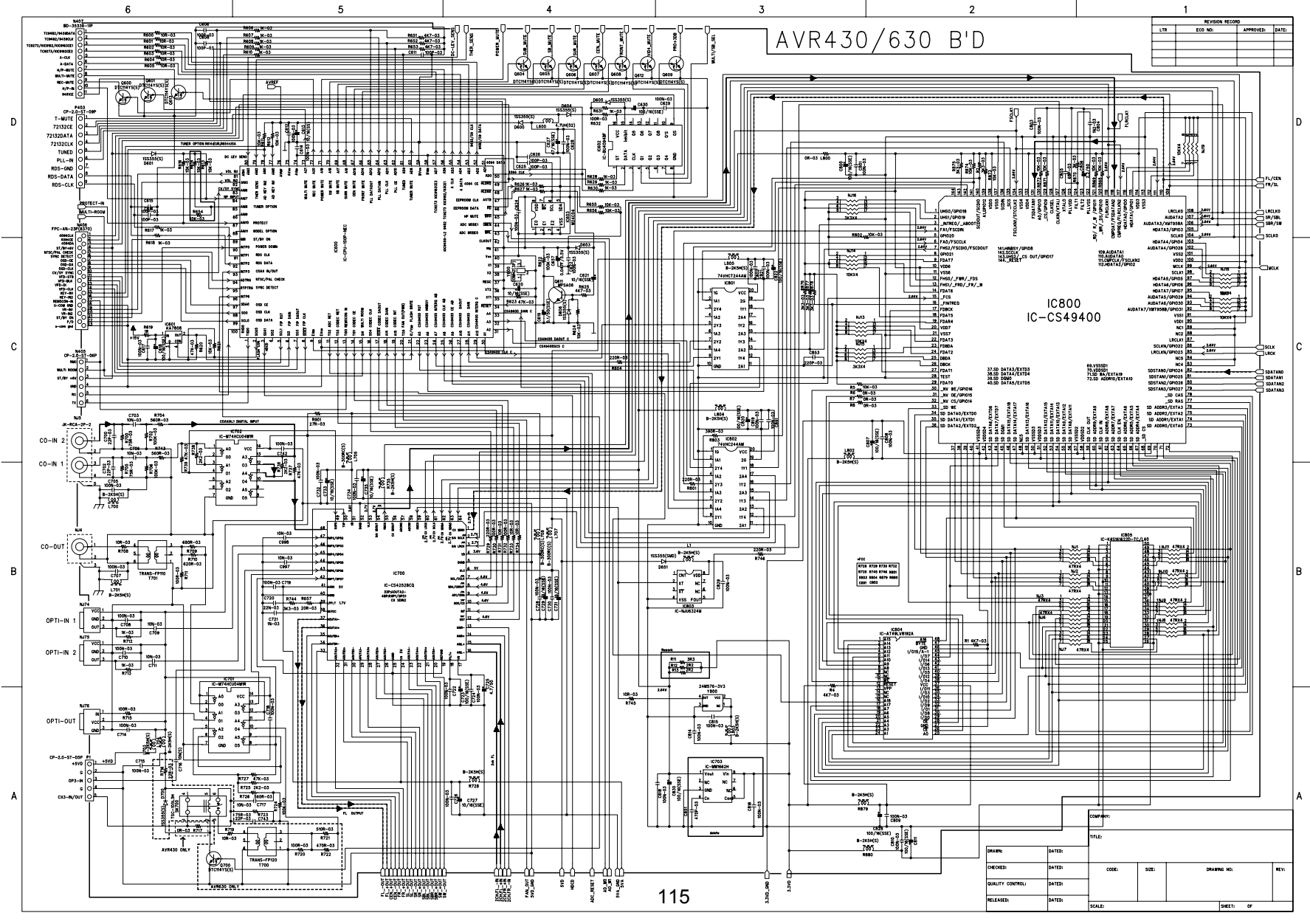
CHECKED:	DATED:				
QUALITY CONTROL:	DATED:				
RELEASED:	DATED:	SCALE:		SHEET: OF	


AVR430/630 B'D
IC800
IC-CS49400
IC700
IC-CS42528CQ
IC-M74HCU04MFR
IC-M74HC244MR
IC-AT49LV8192A
IC-MM9626H
IC-NJU6324M
IC-CP-100P-MEC
REVISION RECORD
LTR
ECO NO:
APPROVED:
DATE:
COMPANY:
TITLE:
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DATE:
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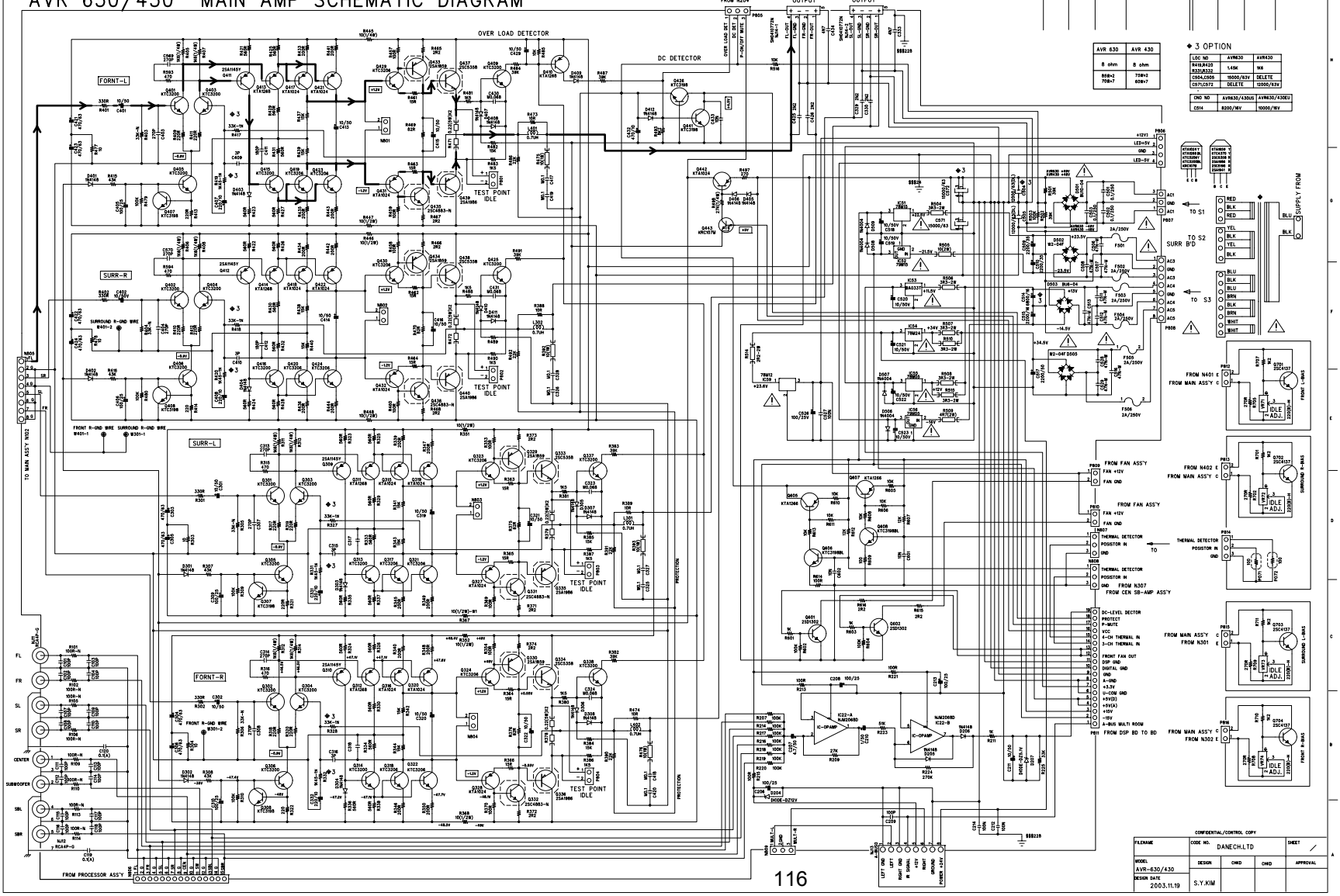
DATE:
CODE:
SIZE:
DRAWING NO:
REV:
SCALE:
SHEET: OF
115

AVR 630/430 MAIN AMP SCHEMATIC DIAGRAM



NO	DATE	POS.	CONTENTS	NO	DATE	POS.	CONTENTS

AVR 630	AVR 430
8 ohm	8 ohm
85W+2 70W+7	73W+2 60W+7

◆ 3 OPTION

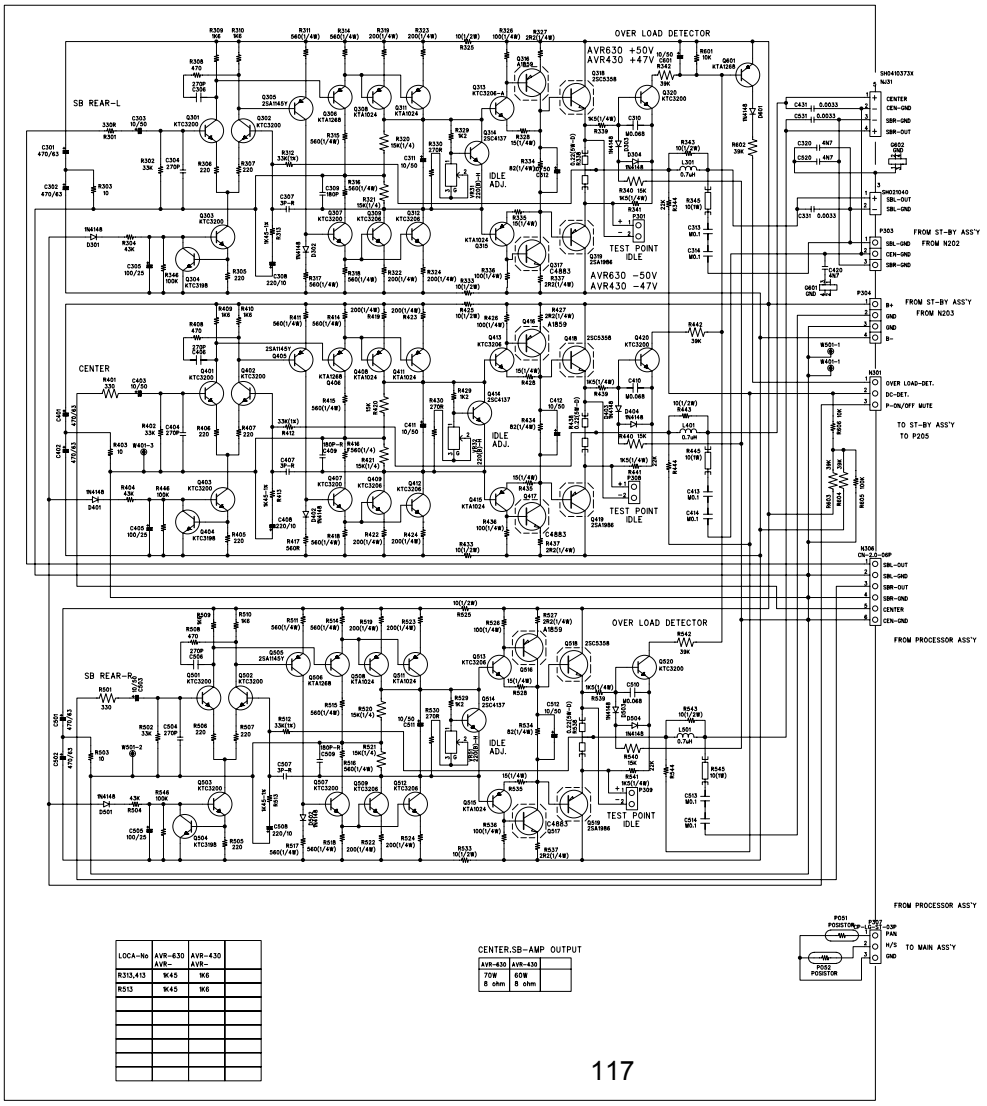
LOC NO	AVR630	AVR430
R432,R433 R331,R332	1.45K	2KR
C504,C505	10000/63V	DELETE
C571,C572	DELETE	12000/63V

CNO NO	AVR630/430US	AVR630/430EU
C514	8200/WV	10000/WV

CONFIDENTIAL/CONTROL COPY

FILENAME	CODE NO.	DANECH.LTD	SHEET
MODEL AVR-630/430	DESIGN	CHKD	CHKD / APPROVAL
DESIGN DATE 2003.11.19	S.Y.KIM		

AVR 630/430 CENTER SB AMP SCHEMATIC DIAGRAM



LOCA-No	AVR-630 AVR-	AVR-430 AVR-	
R313,413	K45	K6	
R513	K45	K6	

CENTER.SB-AMP OUTPUT

AVR-630	AVR-430	
70W 8 ohm	60W 8 ohm	

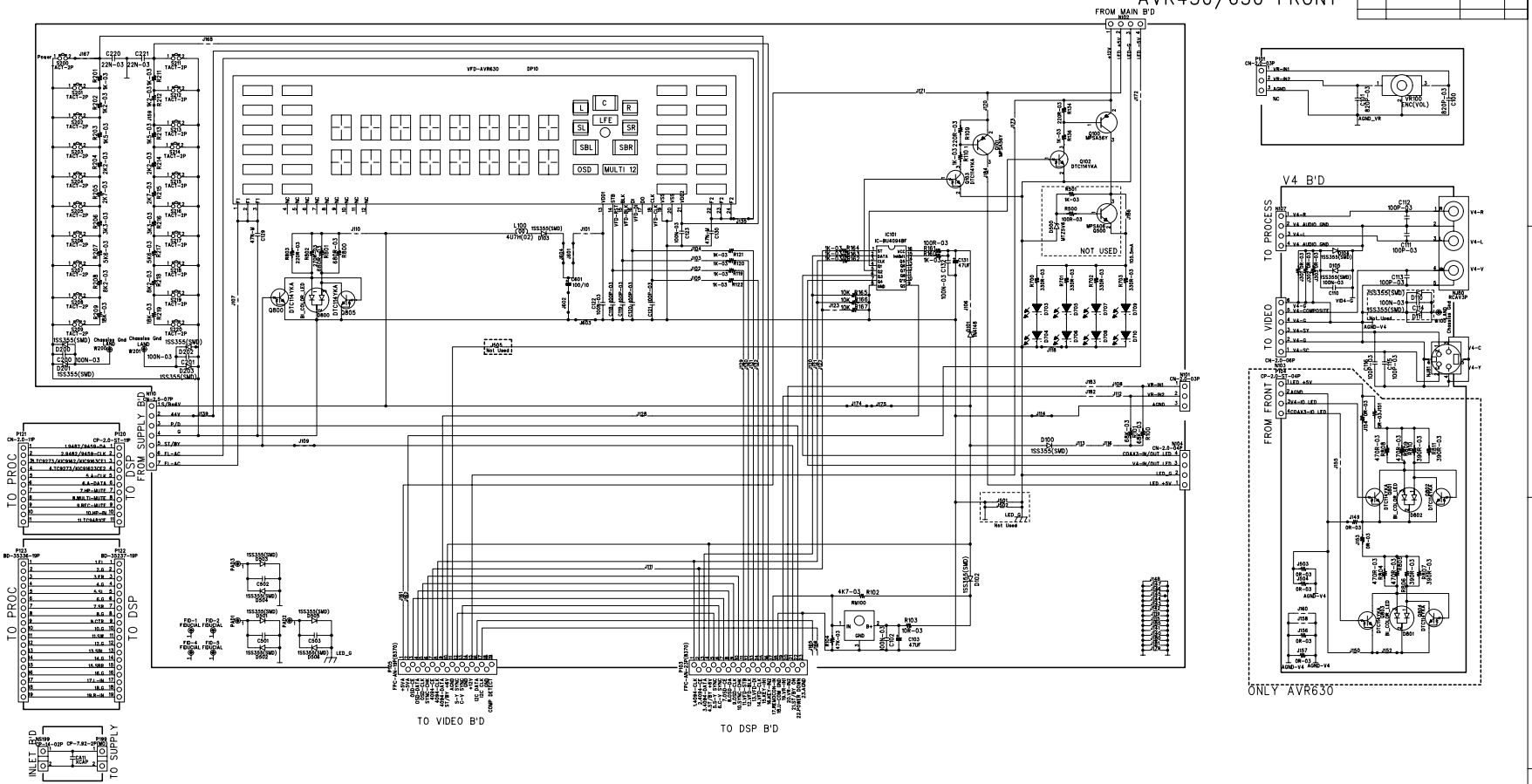
CONFIDENTIAL/CONTROL COPY

FILENAME	CODE NO.			SHEET 1/1
MODEL AVR630/430	DESIGN	CHKD	CHKD	APPROVAL
DESIGN DATE 2003.11.19	S.Y.KIM			

SCHEMATIC DIAGRAM

harman/kardon
AVR430/630 FRONT

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



DRAWN: K.H.PARK	DATED:	COMPANY:	
CHECKED: S.Y.KIM	DATED: Mar.03.2003	TITLE:	
QUALITY CONTROL:	DATED: Apr.01.2003	CODE:	SIZE: DRAWING NO: REV:
RELEASED:	DATED:	SCALE: FITMS	SHEET: 1 OF 1

SCHEMATIC DIAGRAM

harman/kardon
AVR430/630 VIDEO 1/2

REVISION RECORD			
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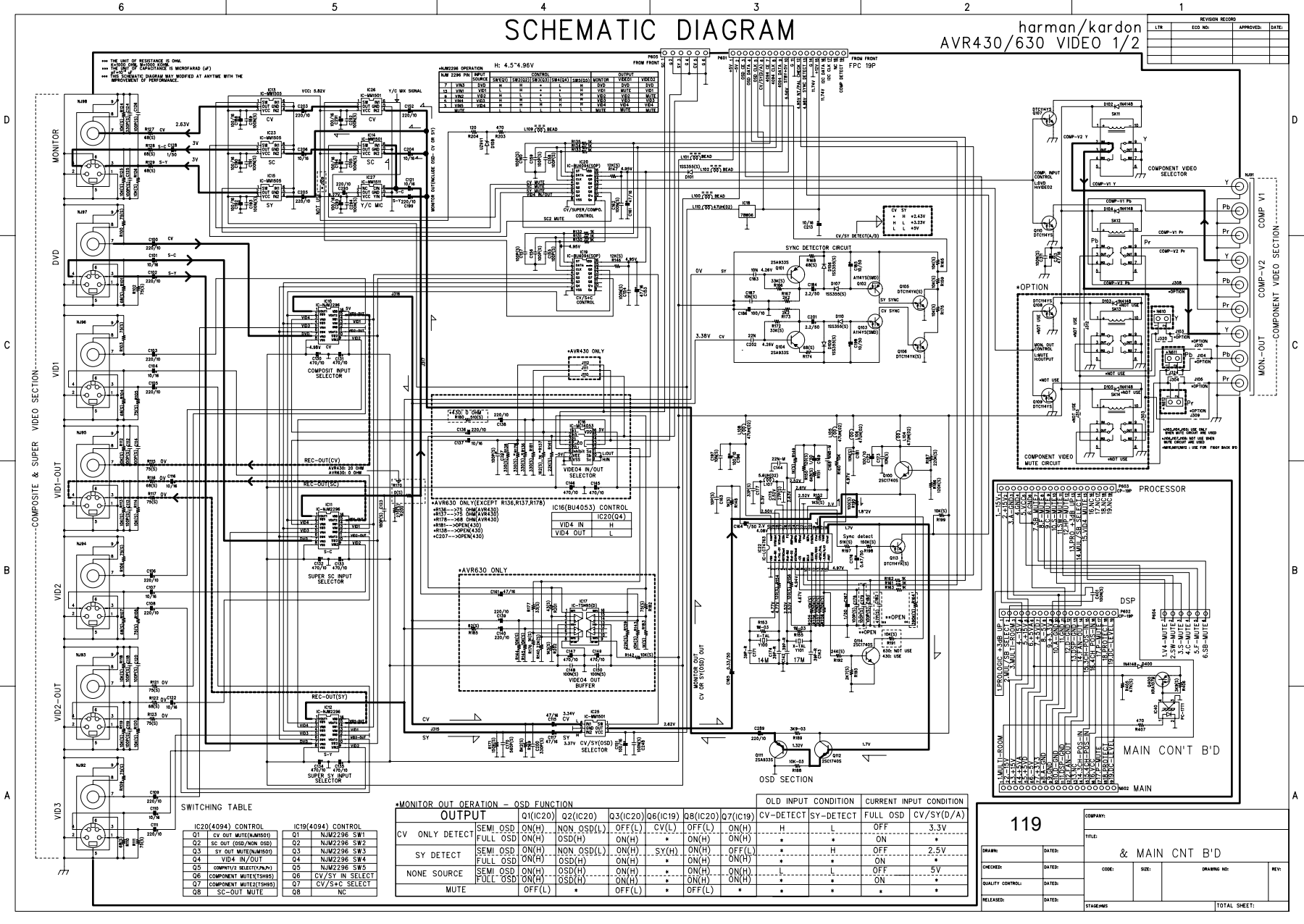

IC20(4094) CONTROL	
Q1	CV OUT MUTE(NJM1501)
Q2	SC OUT (OSD/NON OSD)
Q3	SY OUT MUTE(NJM1501)
Q4	VID4 IN/OUT
Q5	COMPNT1/2 SELECT(Y,Pb,Pr)
Q6	COMPONENT MUTE(TSH95)
Q7	COMPONENT MUTE2(TSH95)
Q8	SC-OUT MUTE

IC19(4094) CONTROL	
Q1	NJM2296 SW1
Q2	NJM2296 SW2
Q3	NJM2296 SW3
Q4	NJM2296 SW4
Q5	NJM2296 SW5
Q6	CV/SY IN SELECT
Q7	CV/S+C SELECT
Q8	NC

OUTPUT		Q1(IC20)	Q2(IC20)	Q3(IC20)	Q6(IC19)	Q8(IC20)	Q7(IC19)	OLD INPUT CONDITION CV-DETECT	OLD INPUT CONDITION SY-DETECT	CURRENT INPUT CONDITION FULL OSD	CURRENT INPUT CONDITION CV/SY(D/A)
CV ONLY DETECT	SEMI OSD	ON(H)	NON OSD(L)	OFF(L)	CV(L)	OFF(L)	ON(H)	H	L	OFF	3.3V
	FULL OSD	ON(H)	OSD(H)	ON(H)	*	ON(H)	ON(H)	*	*	ON	*
SY DETECT	SEMI OSD	ON(H)	NON OSD(L)	ON(H)	SY(H)	ON(H)	OFF(L)	*	H	OFF	2.5V
	FULL OSD	ON(H)	OSD(H)	ON(H)	*	ON(H)	ON(H)	*	*	ON	*
NONE SOURCE	SEMI OSD	ON(H)	OSD(H)	ON(H)	*	ON(H)	ON(H)	L	L	OFF	5V
	FULL OSD	ON(H)	OSD(H)	ON(H)	*	ON(H)	ON(H)	*	*	ON	*
MUTE		OFF(L)	*	OFF(L)	*	OFF(L)	*	*	*	*	*

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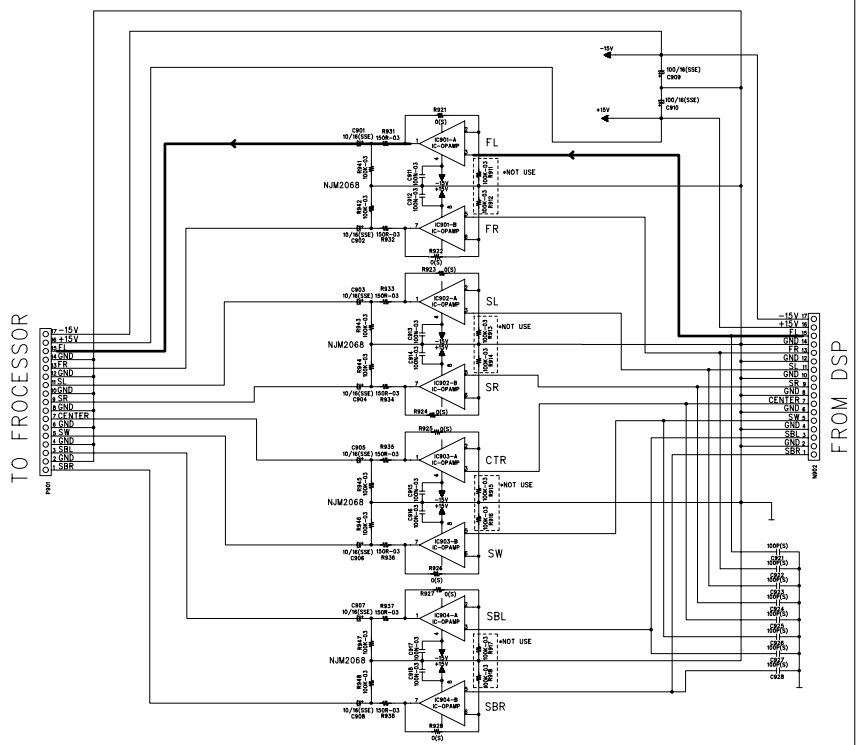
COMPANY:			
TITLE:	& MAIN CNT B'D		
DRAWN:	DATED:	CODE:	SIZE:
CHECKED:	DATED:	DRAWING NO:	REV:
QUALITY CONTROL:	DATED:		
RELEASED:	DATED:	STAGE/MS	TOTAL SHEET:

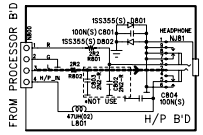
AVR430/630 VIDEO 2/2(RMC,HP,8CH CNT B'D)

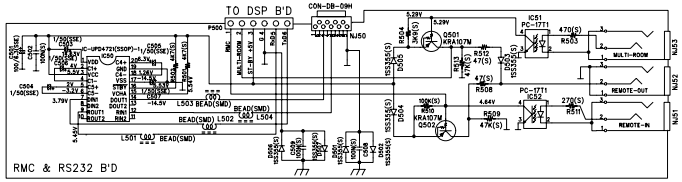
REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

8CH-DIRECT CNT B'D

V+:14.8V
V-: -15.4







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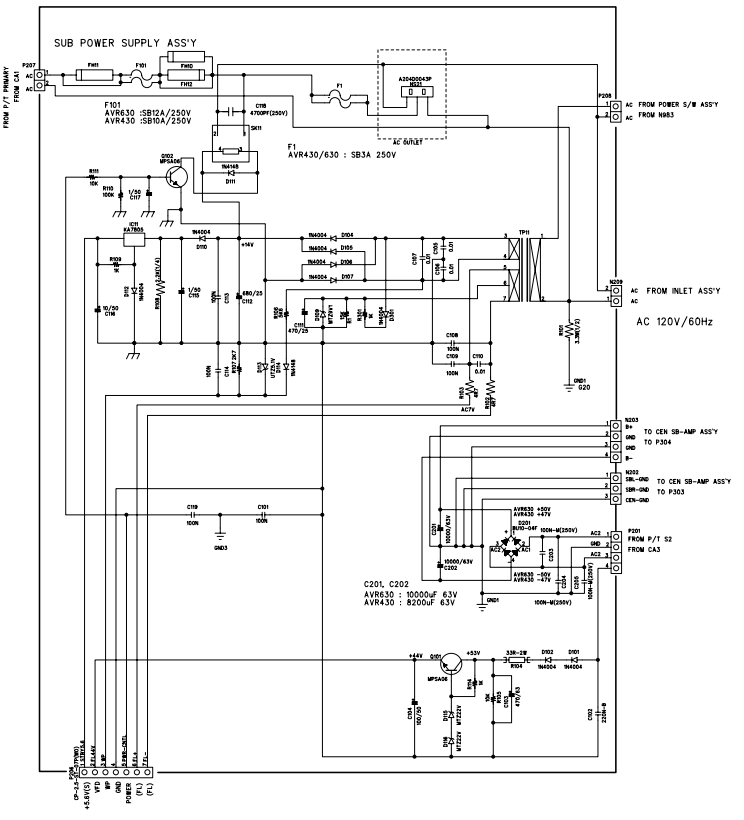
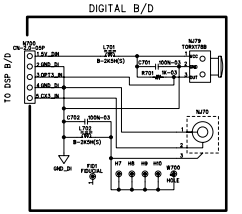
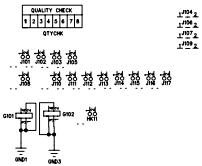
QUALITY CONTROL:	DATED:				
RELEASED:	DATED:	STAGE: TMS		SHEET: 5 OF 10	

AVR 630/430 ST-BY SCHEMATIC DIAGRAM

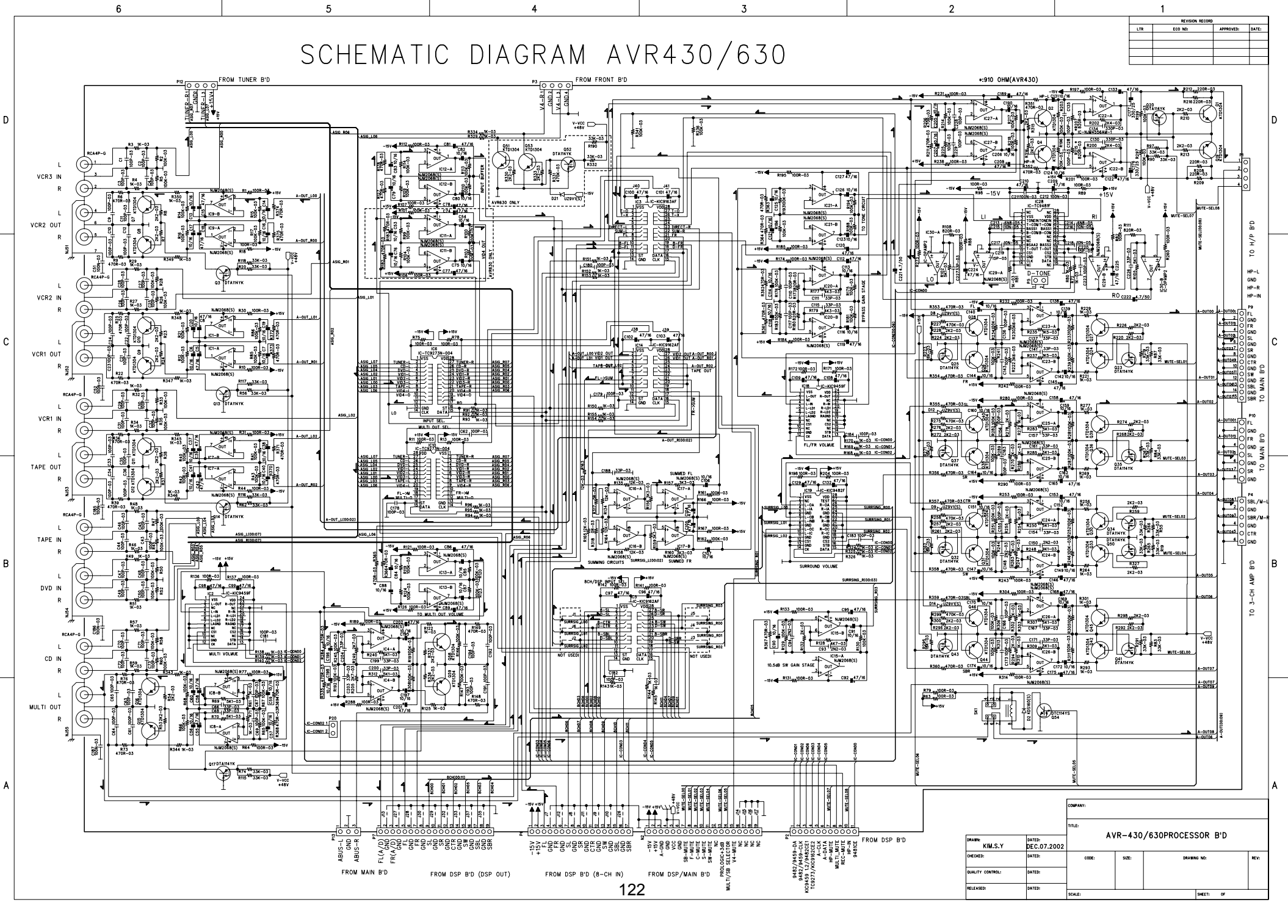


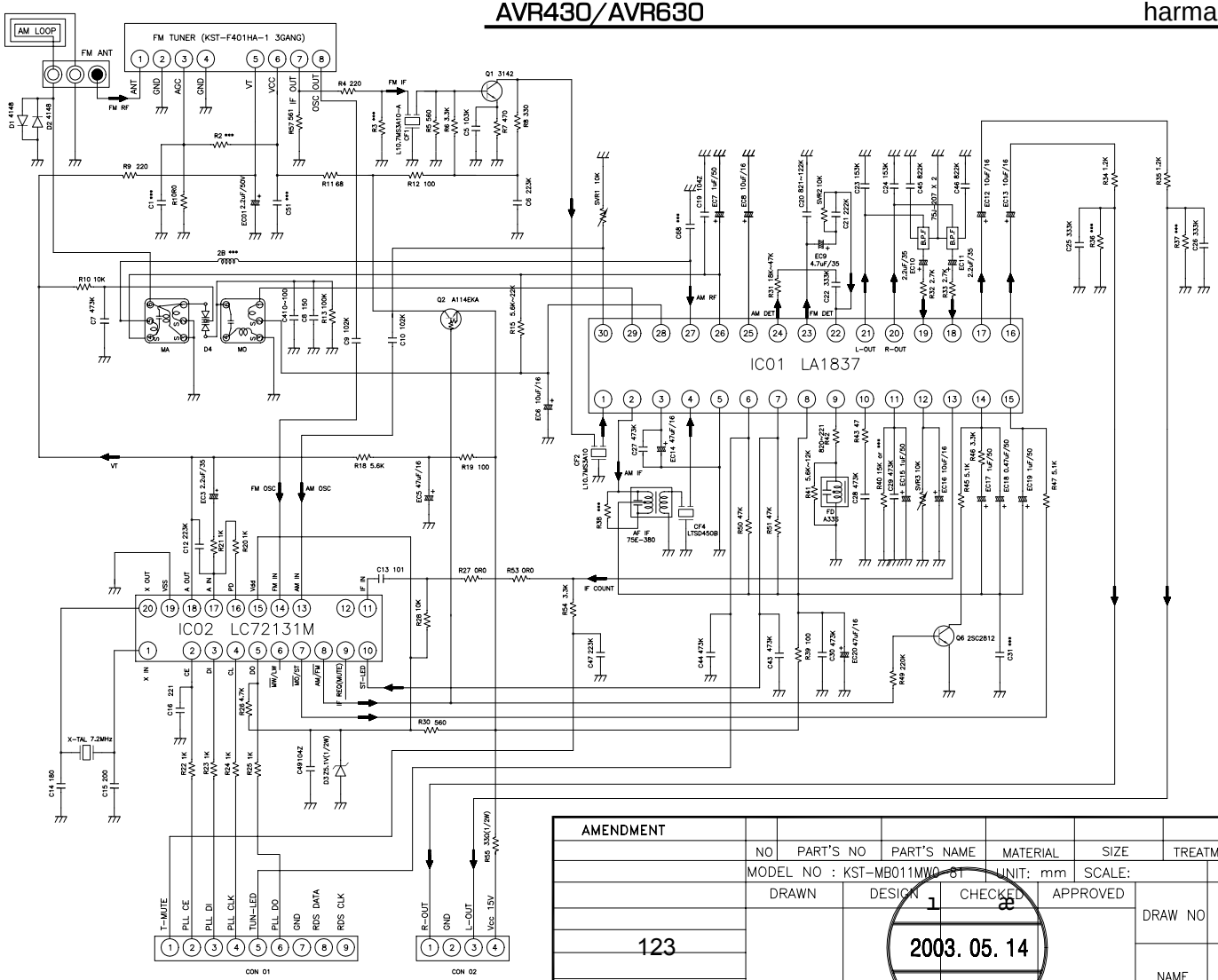




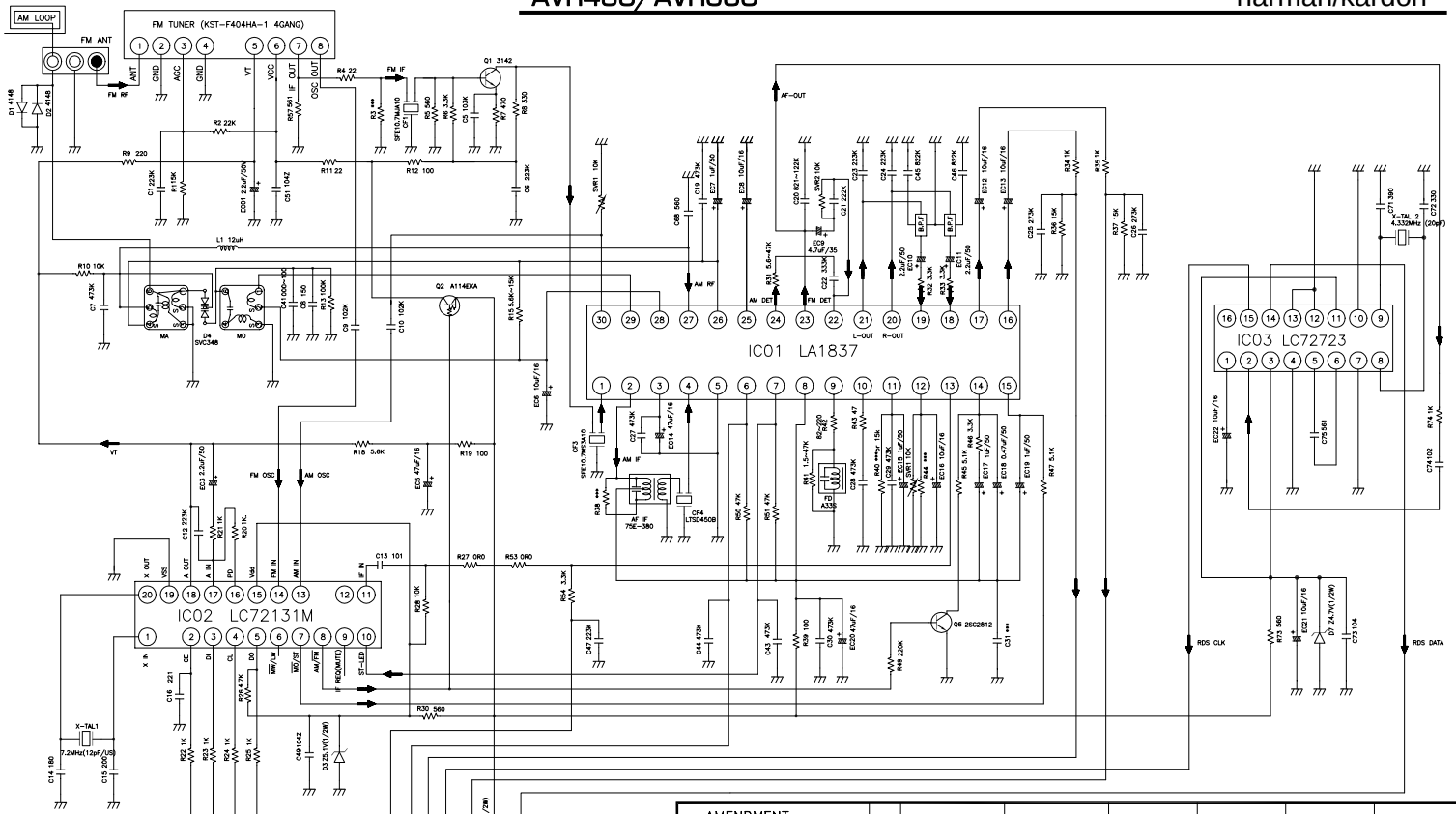
CONFIDENTIAL/CONTROL COPY				
FILENAME	CODE NO.			SHEET 1/1
MODEL AVR630/430	DESIGN	CHKD	CHKD	APPROVAL
DESIGN DATE 2002.10.19	S.Y.KIM			

SCHEMATIC DIAGRAM AVR430/630





AMENDMENT						
NO	PART'S NO	PART'S NAME	MATERIAL	SIZE	TREATMENT	REMARK
MODEL NO : KST-MB011MW0			UNIT: mm	SCALE:		DATE: 2002.09.06
DRAWN	DESIGN	CHECKED	APPROVED	DRAW NO	KSD-M058-672	
123	2003. 05. 14			NAME	SCHEMATIC DIAGRAM	



AMENDMENT							
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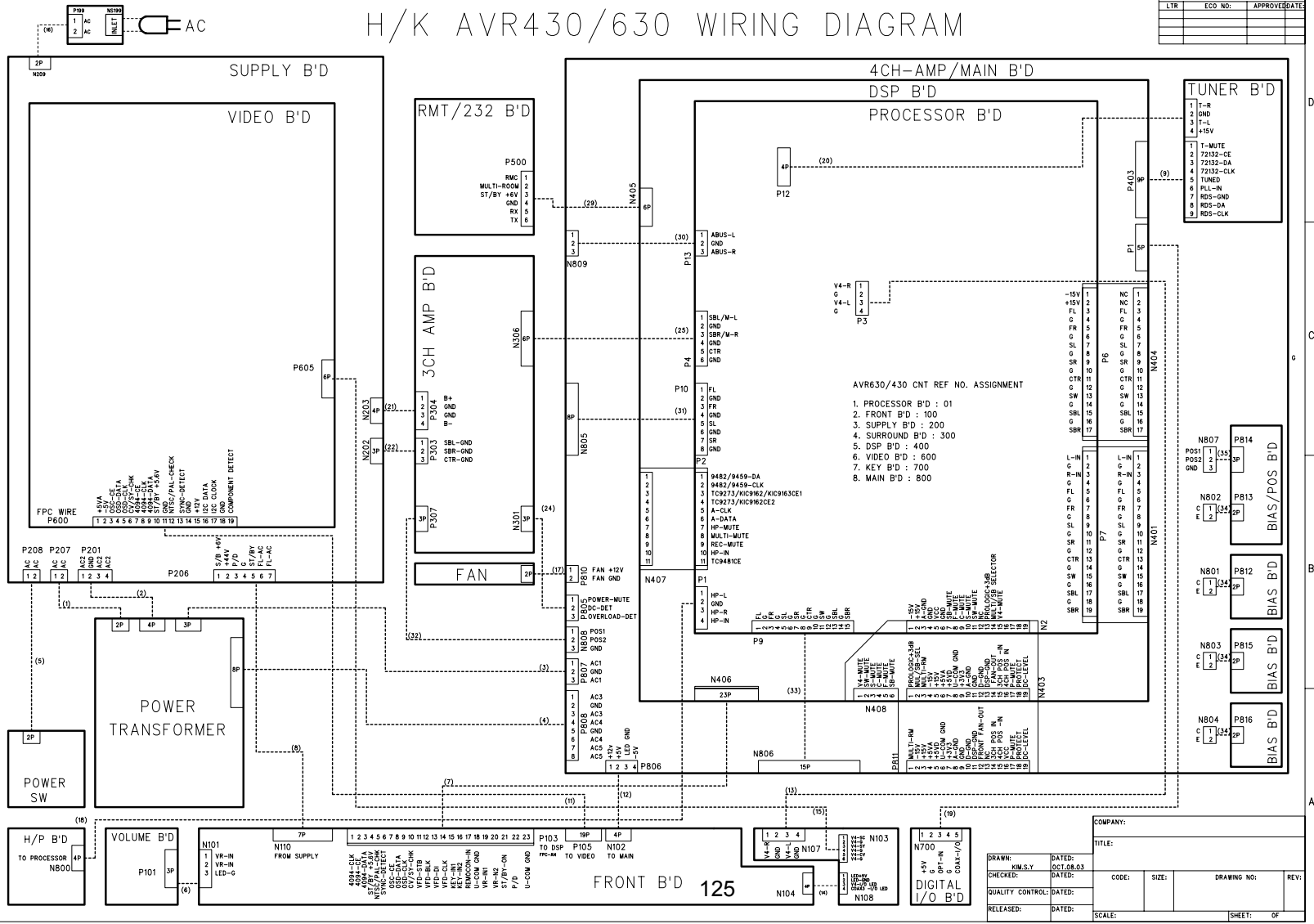
MODEL NO :KST-MB114MWH-81			UNIT: mm	SCALE:			DATE: 2002.10.19
DRAWN	DESIGN		CHECKED	APPROVED		DRAW NO	KSD-M058-67RS
124	2003. 09. 30					NAME	SCHEMATIC DIAGRAM

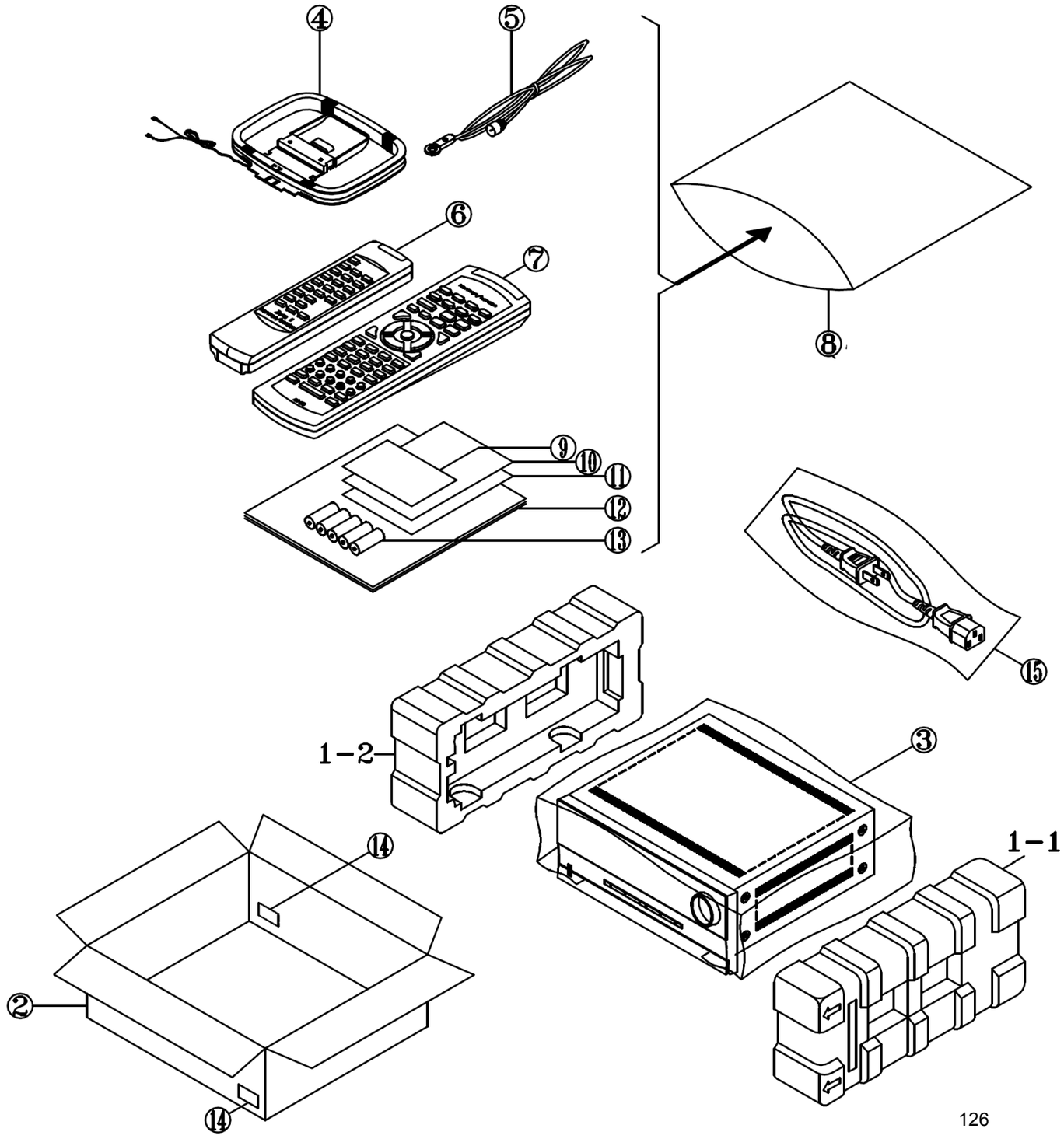
H/K AVR430/630 WIRING DIAGRAM



REVISION RECORD			
LTR	ECO NO:	APPROVED	DATE:

COMPANY:			
TITLE:			
DRAWN: KIM,S.Y	DATED: OCT.08.03		
CHECKED:	DATED:	CODE:	SIZE: DRAWING NO: REV:
QUALITY CONTROL:	DATED:		
RELEASED:	DATED:	SCALE:	SHEET: OF

AVR430-630 PACKAGING



Ref#	Part Number	Description	AVR430 120v	AVR630 120v	AVR430 230v	AVR630 230v
1-1	ZQC1101HAWH-2	Right Foam End	X	X	X	X
1-2	ZQC1102HAWH-9	Left Foam End	X	X	X	X
2	ZKC1004HA00-5	Outer Carton 430-120v	X			
	ZKC1104HA00-A	Outer Carton 630-120v		X		
	ZKD0104HA00-9	Outer Carton 430-230v			X	
	ZKD0204HA00-3	Outer Carton 630-230v				X
3		Plastic Bag	X	X	X	X
4	H01-ATALF039ABK-A	AM Antenna Loop	X	X	X	X
5	H01-WAB01200203-9	FM Antenna 120v	X	X		
	H01-WAD01200303-3	FM Antenna 230v			X	X
6	H01-RYC1202HA00-5	Zone II Remote Control	X	X	X	X
7	BE18A03	Remote Control 430-120v	X			
	BE18A04	Remote Control 630-120v		X		
	H01-RYD0101HA00-8	Remote Control 430-230v			X	
	H01-RYD0201HA00-6	Remote Control 630-230v				X
8		Plastic Bag	X	X	X	X
9		Misc. card	X	X	X	X
10	ZKC1113HA00-9	Warranty Card	X	X	X	X
11		Safety Paper	X	X	X	X
12	ZKC1001HB00-6	Owner's Manual 430-120v	X			
	ZKC1101HA00-0	Owner's Manual 630-120v		X		
	ZKD0101HA00-A	Owner's Manual 430-230v			X	
	ZKD0201HA00-4	Owner's Manual 630-230v				X
13		1.5v AA Batteries	X	X	X	X
14		Label-Barcode 430-120v	X			
		Label-Barcode 630-120v		X		
		Label-Barcode 430-230v			X	
		Label-Barcode 630-230v				X
15	H01-WAUSA2103BK-1	Power Cord – 120v	X	X		
	H01-WAD022000BK-2	Power Cord – 230v			X	X